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MBA PROFESSIONAL REPORT

**An Analysis of Spending Patterns Associated with the PHALANX
Close-In Weapon System (CIWS) Program**

**By: Michael R. Chaparro
December 2003**

**Advisors: John Mutt
Mary Malina**

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**AN ANALYSIS OF SPENDING PATTERNS ASSOCIATED WITH
THE PHALANX CLOSE-IN WEAPON SYSTEM (CIWS) PROGRAM**

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Submitted in partial fulfillment of the requirements for the degree of

MASTERS OF BUSINESS ADMINISTRATION

from the

**NAVAL POSTGRADUATE SCHOOL
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AN ANALYSIS OF SPENDING PATTERNS ASSOCIATED WITH THE PHALANX CLOSE-IN WEAPON SYSTEM (CIWS)

ABSTRACT

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Because it is a mature system, data exist related to past spending patterns and the resultant outputs of that spending. This project analyzes those spending patterns and identifies potential areas of investigation for cost savings.

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LIST OF ACRONYMS

AIT	Alteration Installation Team
A _o	Operational Availability
APDS	Armor Piercing Discarding Sabot
ASM	Anti-Ship Missile
CASREP	Casualty Reporting
CIWS	Close-In Weapon system
CK	Configuration Change
CNET	Chief of Naval Education and Training
CNSL	Commander Naval Surface Forces, Atlantic
CNSP	Commander Naval Surface Forces, Pacific
DWCF	Defense Working Capital Fund
DLA	Defense Logistics Agency
DSA	Design Service Agent
EMI	Electromagnetic Interference
FCTCLANT	Fleet Combat Training Center, Atlantic
FMP	Fleet Modernization Program
FTSCLANT	Fleet Training and Support Center, Atlantic
FTSCPAC	Fleet Training and Support Center, Pacific
HOLC	High Order Language Computing
ILS	Integrated Logistics Support
ISEA	In-Service Engineering Agent
KTR	Contractor
MDT	Mean Down Time
MSD	Material Service Date
MTBF	Mean Time Between Failures
NAVICP	Naval Inventory Control Point
NAVSEA	Naval Sea Systems Command

NWAS/CL	Naval Warfare Assessment Site, China Lake
NWSC/PHD	Naval Warfare Support Center, Port Hueneme Division
OEM Depot	Original Equipment Manufacturer (Raytheon) Depot
OEMDA	Original Equipment Manufacturer (Raytheon) Design Agent
ORDALT	Ordnance Alteration
PBL	Performance Based Logistics
PEO	Program Executive Office
PMS	Planned Maintenance System
PY	Planning Yard
RTS	Raytheon Technical Support
SAR	Ship Alteration Record
SEARAM	Shipboard Rolling Airframe Missile
SHIPALT	Ship Alteration
SID	Ship Installation Drawing
SPM	Shots Per Minute
WPN	Weapons Procurement, Navy

EXECUTIVE SUMMARY

The PHALANX Close-In Weapon System (CIWS) MK 15 program costs were determined after collecting and assembling cost data from the various activities linked to the PHALANX program for fiscal year 2002 (FY02). Similar data were gathered for a study conducted in fiscal year 1998 (FY98); however, additional cost elements (e.g. Type Commander funding and Defense Logistics Agency funding) were used in collecting FY02 data in an effort to gain a clearer understanding of the flow of funds for the program. Because similar data collection efforts were not made for fiscal years 1999, 2000 and 2001, spending patterns for those years could not be analyzed. This study compares like data for FY98 and FY02 and, where necessary, notes the distinction of additional FY02 cost elements.

In addition, best estimate annual ownership costs were gathered for fiscal year 2003 (FY03) that cover each of the cost elements used in FY02. This was done to better compare spending deltas between cost elements in the two years. While acknowledging the possible skew created by the *estimated* FY03 information, these data were used in determining activity rates for each of the cost elements and these rates were then compared to the actual activity rates of FY02.

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I. INTRODUCTION

A. HISTORY

Designed and built by the Raytheon Corporation, the PHALANX Close-In Weapon System (CIWS) is a fast reaction, rapid fire, computer-controlled system comprised of a combination radar and 20mm Gatling gun (see figure 1) that is designed to engage Anti-Ship Missiles (ASM).



Figure 1 - PHALANX BLock 1B System (From: NAVSEA Reliability, Maintainability and Availability (RM&A) Handbook)

The PHALANX is considered a final defense against ASM that have penetrated the outer defensive envelope. PHALANX is considered a total weapon system that draws together a variety of functions that are usually performed by separate independent systems. It provides organic search, detection, threat evaluation, target acquisition, tracking, firing, target destruction evaluation, automatic kill assessment, and cease-fire data to control train, elevation and discharge of the weapon. Independent of other ship's systems, PHALANX will (in its autonomous mode) automatically engage ASM that penetrate the ship's primary outer defense systems. PHALANX configuration

has evolved throughout the years beginning with the Block 0 system that provided basic terminal defense against low flying ASM (see figure 2). The primary operational mode of PHALANX allows the system to continuously search an assigned sector, track and evaluate targets, and engage any target meeting preset threat criteria.

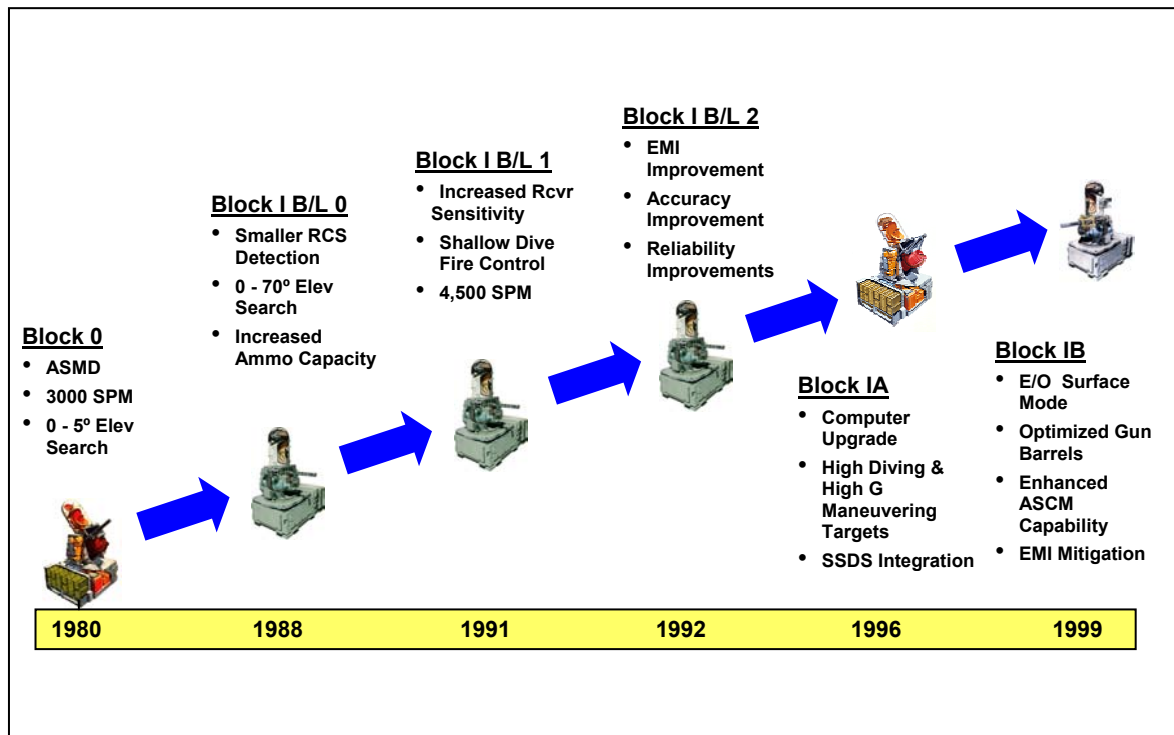


Figure 2 - Progression of PHALANX upgrades (After: NAVSEA RM&A Handbook)

The basic Block 0 PHALANX incorporates both search and track radars, the M61A1 Gatling gun which fires 3000 shots per minute (SPM), and a 980 round magazine for the 20mm Armor Piercing Discarding Sabot (APDS) ammunition. The Block 0 configuration is capable of searching from the horizon to 5 degrees above the horizon. With the advent of ASM that employ pop-up maneuvers and steep dive techniques to counter defenses such as PHALANX, new technology was developed to account for this threat and the Block 1 variant came into existence.

The Block 1/Baseline 0 configuration searches from the horizon to 70 degrees above the horizon to enable a ship to maintain defenses against ASM using steep dive technology. Minor improvements were made to the Block 1 configuration in follow-on Baseline 1. These consisted of increasing the firing rate to 4500 SPM, modifying receiver components to better detect threats, and modifying the tracking system to account for targets exhibiting shallow dive profiles. Block 1/Baseline 2 decreased the unit's susceptibility to electromagnetic interference (EMI), improved firing accuracy by modifying the transmitter mode control unit and replacing the electronic control group, and increased reliability by incorporating an integrated diagnostics system and upgrading power control and distribution. The first major upgrade since the Block 0 to Block 1 change resulted in the Block 1A.

Block 1A incorporated a High Order Language Computer (HOLC) capable of managing high dive and high g-force maneuvering targets as well as Ship's Self-defense System integration. The largest variation from the original PHALANX concept came with the Block 1B upgrade. Until this version of the system was developed, PHALANX had been a purely defensive weapon system relying on threat profile criteria that were gathered by its two radar systems and analyzed by its computer processor. The most significant difference in the Block 1B is the addition of a Surface Mode capability that uses a stabilized platform and Thermal Imager.¹

B. BACKGROUND FOR STUDY

Due to a renewed concern for force protection and, specifically, protection from airborne threats to surface ships, the PHALANX program is being re-evaluated for installation of Block 1B models on new construction ships as an addition to the protection provided by the AIM-7 NATO Sea Sparrow Missile System. In addition, some older platforms are due to receive upgrades to Block 1B. Prior to the September 11, 2001 terrorist acts, the program was being

¹ PHALANX Technical Manual, SW221-JO-MMO Vol. 010, Introduction to CIWS

eliminated from active duty ships and not installed on new construction. OPNAV N76 (Surface Warfare) initiated a request for research into how funds are spent in association with the CIWS program in an effort to determine whether stakeholder spending for the program was being conducted with consideration for the entire program (e.g. Do stakeholders make program spending decisions independent of one another and potentially to the detriment of the program as a whole?).

II. DATA COLLECTION AND ASSEMBLY

The PHALANX Program Office collected funding data for fiscal years 1998 (FY98) and 2002 (FY02). These data were compiled into different cost elements in the hope of gaining some insight into areas of cost savings for the overall program. The FY02 effort produced a set of data that differed slightly from those gathered in FY98. No cost element data were captured for fiscal years 1999, 2000 and 2001.

The following section attempts to outline those differences and present the foundation for the analysis of the two years. Additional cost estimates were gathered for FY03 in March 2003. These estimates are used in later sections to highlight differences in actual FY02 spending and projected FY03 spending.

A. FY98 TO FY02 COMPARABLE COST CATEGORIES AND COST ELEMENTS

Because cost elements used in FY98 do not entirely correspond to those used in FY02, elements and sub-elements have been decompiled into comparable and non-comparable sets. Where possible an effort was made to associate non-comparable FY98 costs with a comparable cost category without sacrificing the validity of the study. These instances and associated assumptions are clearly noted.

The following section lists the cost elements and describes the basic responsibilities of each.

1. Chief of Naval Education and Training (CNET)

Although initial training funding is provided by CNET, the main initial Block 1 training facilities are located at Fleet Training Center, Pacific (FTCPAC) San Diego, California and the Fleet Combat Training Center, Atlantic (FCTCLANT) Damneck, Virginia. This course is designed to provide students with operations and maintenance (O&M) training for the basic Block 1 system and subsystems. The training provides students with approximately two-thirds of required training

for the system and course length is 189 days.² The Block 1A and 1B difference courses provide the additional one-third of required training. Block 1A difference courses are funded by CNET and provided at FCTCLANT Damneck and FTCPAC San Diego; however, due to the relative youth of the Block 1B variant, courses for FY02 were funded by Raytheon and provided by the In-Service Engineering Agent (ISEA) at the Naval Surface Warfare Center, Port Hueneme Division (NSWC/PHD) Detachment, Louisville, KY.

Inasmuch as the basic system remains relatively constant, variations in the Blocks and Baselines make it necessary to instruct technicians in system differences when they are transferred to new commands with differing Blocks and Baselines. The Block 1 to Block 0 difference course is designed to teach Block 0 differences to technicians trained in operation and repair of the Block 1 variant. Opposite that is the Block 0 to Block 1 difference course which teaches variations in the newer system to technicians trained in the original variant. Although the Block 1 to Block 0 difference course has been eliminated, the Block 0 to Block 1 difference course remains in effect and is provided by both FCTCLANT, Damneck and FTCPAC, San Diego.

Initial training for Block 0 units has been phased out and is no longer available at the, once, sole training site located at the FCTCLANT facility in Damneck.

Costs for the CNET cost element are comprised of course material costs, instructor pay costs and student pay costs.

2. In-Service Engineering Agent (ISEA)

ISEA program elements are delineated by core and non-core support actions. Those items related to initial fielding, testing and training for the program are deemed core support actions. Issues dealing with post installation concerns such as initial and checkout (I&C) spares, Fleet Modernization Program (FMP) support, and Naval Inventory control Point (NAVICP) support are considered non-core actions. Table 1 defines all ISEA core elements.

² Navy Training System Plan for PHALANX Close-In Weapon System (CIWS) MK 15, N&^(-NTSP-S-30-0201-A/D, January 2003

Program Management	Core program infrastructure and management
Systems Engineering	Issues associated with fielding and maintaining system. Includes effort aimed at system improvements
Test and Evaluation	Test and Evaluation of fielded and “to be” fielded systems
Acquisition Management	Issues associated with acquiring systems and sub-components (Spares, Ordnance Alteration [ORDALT] Kits, change [Delta] kits, etc.)
Production Eng Support	Issues associated with producing systems and sub-components
Integrated Logistics Support	Issues associated with ensuring systems receive full logistics support (Planned Maintenance System [PMS], technical manuals, spare parts, etc.)
Installation/Removal Support	Issues associated with installing new systems, incorporating upgrades to the existing configuration, and removal of old systems for overhaul and demilitarization
Configuration Management	Issues associated with reporting configuration changes
Training Support	Issues associated with training personnel in PHALANX system

Table 1 – NSWC core support elements

Naval Surface Warfare Center, Port Hueneme Division (NSWC PHD) Detachment Louisville, maintains Installation and Checkout (INCO) spares for Weapons Procurement, Navy (WPN) funded Alteration Installation Team (AIT) installations prior to Naval Inventory Control Point (NAVICP) establishing Material Support Date (MSD).³ All non-core support elements are listed in Table 2.

³ PHALANX Technical Manual, SW221-JO-MMO Vol. 060, Maintenance

CIWS-AEGIS Eng Support	Issues associated with Phalanx CIWS engineering support. AEGIS costs are not applicable unless tied to Phalanx integration
CIWS LOCO	Issues associated with Phalanx CIWS Light-Off and Check-Off
CIWS I&C Spares	Issues associated with procuring and providing Initial and Checkout Spares
Foreign Mil Sales (Non PEO)	Issues associated with procuring and providing systems under the Foreign Military Sales program
ORDALT Acquisition Support	Issues associated with procuring and providing ORDALTs to the Phalanx system
FMP Support	Issues associated with fielding system upgrades
NAVICP Support	Issues associated with identifying and coordinating NAVICP logistics support
Installation Support	Issues associated with acquiring additional labor beyond core personnel dedicated to this work effort

Table 2 - NSWC non-core cost elements

In effect, the ISEA provides logistical support for the system in its transition to permanent support through the NAVICP supply system. The ISEA also provides Casualty Reporting (CASREP) support via NAVICP requests generated by the individual command.

3. Fleet Training and Support Centers, Atlantic Fleet and Pacific Fleet (FTSCLANT/FTSCPAC)

FTSCLANT and FTSCPAC provide technical assistance to individual commands in the form of senior technicians with training and experience working on the PHALANX system. Technicians conduct operational and material condition assessment. In addition, FTSCs provide Integrated Logistics Support (ILS) and planned maintenance support. Fleet Modernization Program management support is also provided by the FTSCs.

4. Navy Inventory Control Point / Performance Based Logistics (NAVICP/PBL)

Two main cost elements are associated with the NAVICP. Defense Logistics Agency (DLA) costs stem from procurement, storage and distribution of repair parts for the system following initial checkout and upon establishment of a Material Support Date (MSD). The main function of DLA is in centralized warehousing of system repair parts which alleviates the need for procurement from individual vendors on each occurrence of a component or system malfunction. DLA operates as a Defense Working Capital Fund (DWCF).

To further enhance the ability to perform rapid repairs to systems that are degraded by component malfunction or through normal wear, the Performance Based Logistics (PBL) program was instituted. By tracking failure rates and quantities this system attempts to more readily provide high failure component parts to requesting commands.

5. Program Executive Office (PEO)

PHALANX PEO, Naval Sea Systems Command (NAVSEA), is composed of five cost elements. Acquisition Management, Engineering Management, and Program Management all fall under NAVSEA purview. These three cost elements provide for review and approval/disapproval of new variants, upgrades and interfaces. In addition, NAVSEA provides Fleet Support in the form of overarching system technical assistance such as monitoring Configuration Changes (CKs), Ordnance Alterations (ORDALTs), Planned Maintenance System (PMS) feedback reports and technical manual changes. Lastly,

NAVSEA supports the PHALANX Enhancement Program by providing funding to Raytheon, Louisville, KY for the Raytheon Technical Services (RTS) offices in Norfolk, VA and San Diego, CA. These offices provide waterfront refurbishment of PHALANX mounts in the form of thorough system inspection and cleaning.

6. Original Equipment Manufacturer Design Agent (OEM DA)

OEM DA responsibilities reside with Raytheon, Tuscon, AZ and consist of providing contracted technical assistance.

7. Original Equipment Manufacturer Depot (OEM Depot)

Depot level repairs are those that must be accomplished by the system manufacturer due to their complexity. Raytheon, Louisville, KY provides this function as a contracted cost.

8. Sailors

Costs for individually trained fleet sailors are based on a median pay rate and the overall number of billets assigned for the system.

9. Fleet Modernization Program (FMP)

The goal of the FMP is to provide funding for existing system configuration changes (CK) using Alteration Installation Teams (AIT). FMP also funds the Design Service Agent (DSA) for Planning Yards (PY) to develop Ship Alteration Records (SAR) in addition to Ship Alteration (SHIPALT) and Ship Installation Drawings (SID).

B. FY98 TO FY02 NON-COMPARABLE COST CATEGORIES AND COST ELEMENTS

1. Original Equipment Manufacturer (OEM) Spares & Repairs

This element is concerned with spare parts provided by, and the repair of items performed by the Raytheon Corporation. They were assigned to OEM Depot for FY98 to account for total OEM spending, however FY02 costs for this element were dispersed among several of the remaining cost elements.

2. Contractor (KTR) Spares & Repairs

Spare parts and repairs performed under contract were not delineated as a separate cost element in FY02 and were, therefore, not useable for a direct comparison to FY02 data.

3. Type Commanders (TYCOM)

The Commander Naval Surface Force, Pacific (CNSP) and Commander Naval Surface Force Atlantic (CNSL) cost elements attempt to capture operating target (OPTAR) costs for routine and corrective maintenance not requiring repair part procurement. These items are largely consumable (e.g. oils, lubricants, rags, etc.) and include funding spent for material condition reviews, inspections, and refurbishments. Although these costs likely existed in FY98, the scope of the data collection effort, at that time, did not extend to encompass these cost elements.

4. Naval Weapons Assessment Site, China Lake (NWAS/CL)

Reliability testing costs incurred at NWAS/CL were not captured for FY98 and, thus, could not be compared to the FY02 cost element.

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III. ANALYSIS OF COST VARIANCES

In addition to data being organized into cost elements, they are also arranged into cost categories to allow for analysis of spending for civilian and military labor, materials, contractor labor and materials, and travel for both government employees and contractors.

The differences in spending were measured between FY98 and FY02 using actual cost data. In addition, actual FY02 data were measured against estimated FY03 costs that were given by the respective field activities (cost elements). Results of the analysis are presented in the form of a percent of change with respect to the earliest year under consideration. Data for this analysis can be found in Appendices A and B. All FY98 and FY03 dollars values found in the appendices have been adjusted to match constant FY02 dollars using a 1.2% inflation rate. These same values are used in Tables 3 through 19.

A. TOTAL COST ELEMENT CHANGES

The approach for analyzing total cost changes was to divide the difference in total costs for each cost element by the base year total cost for that element. This resulted in a percentage of the change in total costs between two periods for each cost element. Example 1 shows the calculation used to determine total cost changes for ISEA from FY98 to FY02.

$$\frac{ISEA_{FY02} - ISEA_{FY98}}{ISEA_{FY98}} = \frac{\$5,553,524 - \$4,958,910}{\$4,958,910} = 12\%$$

Example 1

B. FY98 TO FY02 COMPARISON

1. Total Element Costs

Total cost variances offered a starting point for analysis and gave the first look into relative changes in the spending pattern for the program. Further cost breakdowns are shown in future sections and offer a greater insight to issues driving cost increases.

The changes in how cost element data were collected in FY02 allowed for a line by line comparison of only 98% of the FY02 costs. These comparisons showed increases in several areas; most notable was OEM Depot at 286%. The results for all comparable cost elements between FY98 to FY02 are presented in Table 3.

<u>Cost Element</u>	<u>FY98</u>	<u>FY02</u>	<u>% Change</u>
ISEA	\$ 4,958,910	\$ 5,553,524	12%
FTSCLANT	\$ 1,545,988	\$ 2,105,319	36%
FTSCPAC	\$ 1,116,061	\$ 1,243,750	11%
NAVICP	\$20,483,885	\$28,656,465	40%
PEO	\$ 1,381,865	\$ 1,524,302	10%
OEM DA	\$ 2,083,322	\$ 3,050,000	46%
OEM Depot	\$12,182,420	\$47,069,549	286%
Sailors	\$35,058,479	\$45,971,834	31%
CNET	\$10,464,258	\$ 9,838,127	-6%
Students	\$ 4,816,886	\$ 5,676,780	18%
FMP	\$ 5,383,226	\$ 1,542,000	-71%
Total	\$ 99,475,300	\$152,231,650	53%

Table 3 – Cost element funding and percent change for FY98 and FY02 (FY02 \$)

2. Total Category Costs

Similar cost variances were calculated for the program cost categories and results are shown in table 4. While total costs increased by 53%, a much larger increase of 395% in contractor labor was seen in FY02. Contractor travel and material costs were not captured for FY98 and a clear comparison could not be made.

<u>Cost Category</u>	<u>FY98</u>	<u>FY02</u>	<u>% Change</u>
Government Labor	\$ 66,984,219	\$ 66,797,125	0%
Government Travel	\$ 816,959	\$ 624,726	-24%
Government Material	\$ 16,036,120	\$ 10,401,229	-35%
Contractor Labor	\$ 14,923,982	\$ 73,929,380	395%
Contractor Travel/Material	\$ -	\$ 146,675	100%
Total Costs	\$ 99,475,300	\$152,231,650	53%

Table 4 – Cost category spending and percent change for FY98 and FY02 (FY02 \$)

3. Government Employee Labor Costs

Each cost category was then broken down into cost element spending for that particular category. Results for government labor spending are given in Table 5. Interestingly, although cost *increases* are the focus of this study, an important note is the 99% decrease in NAVICP labor rates. NAVICP reduced its

<u>Cost Element</u>	<u>FY98</u>	<u>FY02</u>	<u>% Change</u>
ISEA	\$ 2,979,608	\$ 3,431,071	15%
FTSCLANT	\$ 1,470,900	\$ 1,363,919	-7%
FTSCPAC	\$ 1,223,112	\$ 1,069,341	-13%
NAVICP	\$ 5,183,885	\$ 53,465	-99%
PEO	\$ 403,865	\$ 416,302	3%
Sailors	\$35,058,479	\$45,971,834	31%
CNET	\$10,464,258	\$ 7,272,413	-31%
Students	\$ 4,816,886	\$ 5,676,780	18%
FMP	\$ 5,383,226	\$ 1,542,000	-71%
Total	\$ 66,984,219	\$66,797,125	0%

Table 5 - Government travel costs and percent change for FY98 and FY02

labor costs by approximately \$5.1 million while maintaining the same workforce. This decrease seemed unrealistic and represented a potential problem with the data. Further investigation revealed that the Naval Supply Systems Command (NAVSUP) determined that manning levels remain the same regardless of which

programs were being supported.⁴ Therefore, the associated PHALANX labor cost total for NAVICP appears to be a percentage estimate (approximately 1%) of overall NAVICP labor for all programs that it supports. This change represented a change in accounting principles that invalidated this portion of the government labor comparison. Although accounting methodology changed from FY98 to FY02, NAVICP support of PHALANX remained the same for both years.

Cost elements that are not listed reported no spending for this category in either year. Similar cost element absences will be noted in future tables for the same reason.

4. Government Employee Travel Costs

FTSCPAC saw a 38% increases in travel costs while FTSCCLANT costs dropped 60%. Additionally, Program Office costs for this category rose 20%. Table 6 lists all travel cost variances.

<u>Cost Element</u>	<u>FY98</u>	<u>FY02</u>	<u>% Change</u>
ISEA	\$ 428,347	\$ 301,617	-30%
FTSCCLANT	\$ 212,000	\$ 85,700	-60%
FTSCPAC	\$ 126,612	\$ 174,409	38%
NAVICP	\$ -	\$ 3,000	
PEO	\$ 50,000	\$ 60,000	20%
Total	\$ 816,959	\$ 624,726	-24%

Table 6 – Government travel costs and percent change for FY98 and FY02

5. Government Material Costs

ISEA costs for materials rose 55% as shown in Table 7. CNET and PEO costs were reported as \$2.56M and \$5,000 respectively, however, no corresponding FY98 costs were available for comparison.

⁴ Correspondence with Mr. Robert Kissinger, NSSC, 27 February 2003

<u>Cost Element</u>	<u>FY98</u>	<u>FY02</u>	<u>% Change</u>
ISEA	\$ 494,320	\$ 767,515	55%
FTSCLANT	\$ 241,800	\$ 63,000	-74%
NAVICP	\$15,300,000	\$ 7,000,000	-54%
PEO	\$ -	\$ 5,000	
Total	\$ 16,036,120	\$ 10,401,229	-35%

Table 7 – Government material costs and percent change for FY98 and FY02

6. Contractor Labor Costs

Contractor costs, as shown in Table 8, increased dramatically from FY98 to FY02 for three of the six cost elements reporting spending in this area. ISEA, FTSCLANT and OEM Depot all reported costs in excess of 300% over those reported in FY98. Also notable is that FTSCLANT reported \$586,000 in contractor costs while FTSCPAC reported none.

<u>Cost Element</u>	<u>FY98</u>	<u>FY02</u>	<u>% Change</u>
ISEA	\$ 144,208	\$ 580,831	303%
FTSCLANT	\$ 120,000	\$ 586,000	388%
NAVICP	\$ -	\$21,600,000	
PEO	\$ 928,000	\$ 1,043,000	12%
OEM DA	\$ 2,083,322	\$ 3,050,000	46%
OEM Depot	\$11,648,452	\$47,069,549	304%
Total	\$ 14,923,982	\$ 73,929,380	395%

Table 8 – Contractor labor costs and percent change for FY98 and FY02

7. Contractor Travel and Material Costs

Only two cost elements reported spending in this category and this spending was only accounted for in FY02. No cost elements recorded contractor travel costs for FY98. ISEA and FTSCLANT listed FY02 costs at approximately

\$113,000 and \$34,000 respectively. Note, again, that FTSCPAC reported no spending in this contractor category.

C. FY02 TO FY03 COMPARISON

1. Total Element Costs

The similar cost element lines in FY02 and FY03 allowed for comparison of all cost elements for both years, however, projections for FY03 were not considered a reliable measure of actual costs. Cost element comparisons for these years are found in Table 9. The bottom line showed an expected total increase of 28% for the program. Inspection of individual cost elements revealed increases of 210% for FMP and 716% for CNSP. Increases in the OEM Depot and Sailors cost elements totaled 24% and 23% respectively and had the combined impact of a \$21M increase. Additionally, a 24% increase in NAVICP corresponded to approximately \$7M in new spending.

Cost Element	<u>FY02</u>	<u>FY03</u>	<u>% Change</u>
ISEA	\$ 5,553,524	\$ 7,916,607	43%
NWAS	\$ 200,000	\$ 250,000	25%
FTSCLANT	\$ 2,105,319	\$ 2,005,169	-5%
FTSCPAC	\$ 1,243,750	\$ 1,301,643	5%
NAVICP	\$28,656,465	\$35,468,625	24%
PEO	\$ 1,524,302	\$ 1,589,613	4%
OEM DA	\$ 3,050,000	\$ 3,025,000	-1%
OEM Depot	\$47,069,549	\$58,199,000	24%
Sailors	\$45,971,834	\$56,507,832	23%
CNET	\$ 9,838,127	\$10,133,272	3%
Students	\$ 5,676,780	\$ 5,847,082	3%
FMP	\$ 1,542,000	\$ 4,773,000	210%
CNSP	\$ 1,252,543	\$10,220,318	716%
CNSL	\$ 900,000	\$ 577,500	-36%
Total Costs	\$152,231,650	\$197,564,661	28%

Table 9 – Cost element funding and percent change for FY02 and FY03

2. Total Category Costs

As shown in Table 10, the largest increases were found in government material and contractor travel and material.

<u>Cost Category</u>	<u>FY02</u>	<u>FY03</u>	<u>% Change</u>
Government Labor	\$ 66,797,125	\$ 82,273,459	23%
Government Travel	\$ 624,726	\$ 532,303	-15%
Government Material	\$ 10,401,229	\$ 48,984,424	371%
Contractor Labor	\$ 73,929,380	\$ 63,937,650	-14%
Contractor Travel/Material	\$ 146,675	\$ 1,680,273	1046%
Total Costs	\$152,231,650	\$197,564,661	30%

Table 10 – Cost category spending and percent change for FY02 and FY03

3. Government Labor Costs

Table 11 shows all government labor costs for FY02 and FY03. Expected increases in FMP labor spending exceeded 200% while ISEA budgeted an

<u>Cost Element</u>	<u>FY02</u>	<u>FY03</u>	<u>% Change</u>
ISEA	\$ 3,431,071	\$ 4,521,920	32%
NWAS	\$ 200,000	\$ 250,000	25%
FTSCLANT	\$ 1,363,919	\$ 1,455,469	7%
FTSCPAC	\$ 1,069,341	\$ 1,115,382	4%
NAVICP	\$ 53,465	\$ 55,125	3%
PEO	\$ 416,302	\$ 443,963	7%
Sailors	\$45,971,834	\$56,507,932	23%
CNET	\$ 7,272,413	\$ 7,490,586	3%
Students	\$ 5,676,780	\$ 5,847,082	3%
FMP	\$ 1,542,000	\$ 4,773,000	210%
CNSP	\$ -	\$ -	
CSNL	\$ -	\$ 63,000	
Total	\$66,797,125	\$82,273,459	23%

Table 11 – Government labor costs and percent change for FY02 and FY03

additional \$1.1M in labor costs. Assuming that workforce estimates remained the same in FY03 as they were in FY02, labor increases for Sailors far exceeded the

expected 4% “cost of living” increase. Also, CNSL budgeted for \$63,000 in labor costs while CNSP expected none.

4. Government Travel Costs

Government travel costs were relatively low for both years and no significant variances were noted. All costs are listed in Table 12.

<u>Cost Element</u>	<u>FY02</u>	<u>FY03</u>	<u>% Change</u>
ISEA	\$ 301,617	\$ 177,542	-41%
FTSCLANT	\$ 85,700	\$ 105,000	23%
FTSCPAC	\$ 174,409	\$ 186,261	7%
NAVICP	\$ 3,000	\$ 3,500	17%
PEO	\$ 60,000	\$ 60,000	0%
Total	\$ 624,726	\$ 532,303	-15%

Table 12 – Government travel costs and percent change for FY02 and FY03

5. Government Material Costs

NAVICP had the most significant government material cost increase at 406%. Estimates for FY03 were almost \$28M more than FY02. Additionally, CNSP expects \$10.2M in material costs while the CNSL budget was only \$205,000. Table 13 shows all government material costs for FY02 and FY03.

<u>Cost Element</u>	<u>FY02</u>	<u>FY03</u>	<u>% Change</u>
ISEA	\$ 767,515	\$ 437,920	-43%
FTSCLANT	\$ 63,000	\$ 63,000	0%
NAVICP	\$ 7,000,000	\$35,410,000	406%
PEO	\$ 5,000	\$ 5,000	0%
CNET	\$ 2,565,714	\$ 2,642,686	3%
CNSP	\$ -	\$10,220,318	
CNSL	\$ -	\$ 205,500	
Total	\$ 10,401,229	\$ 48,984,424	371%

Table 13 – Government material costs and percent change for FY02 and FY03

6. Contractor Labor Costs

All contractor labor costs for FY02 and FY03 are shown in Table 13. Although ISEA showed the largest percent increase with 74%, a 24% rise in OEM Depot projected spending amounted to an approximate \$11.2M increase over FY02 spending. Lastly, NAVICP reported \$21.6M in spending for FY02, yet budgeted nothing for contractor labor in FY03. Once again, FTSCPAC did not report any contractor costs for FY02, nor did it expect any for FY03. Similarly, although CNSL expected \$245,000 in contractor labor, CNSP anticipated no contractor labor costs for FY03.

Cost Element	FY02	FY03	% Change
ISEA	\$ 580,831	\$ 1,013,000	74%
FTSCLANT	\$ 586,000	\$ 375,000	-36%
NAVICP	\$21,600,000	\$ -	
PEO	\$ 1,043,000	\$ 1,080,650	4%
OEM DA	\$ 3,050,000	\$ 3,025,000	-1%
OEM Depot	\$47,069,549	\$58,199,000	24%
CNSL	\$ -	\$ 245,000	
Total	\$73,929,380	\$63,937,650	-14%

Table 14 – Contractor labor costs and percent change for FY02 and FY03

7. Contractor Travel and Material Costs

FTSCLANT reported \$34,000 in FY02 costs and expected the same in FY03 while, once again, FTSCPAC projected no spending for contractor materials and travel. ISEA, however, predicted an increase of almost 14 times the amount of FY02 spending for this category. Table 15 shows the totals for the two cost elements.

<u>Cost Element</u>	<u>FY02</u>	<u>FY03</u>	<u>% Change</u>
ISEA	\$ 112,675	\$ 1,646,273	1361%
FTSCLANT	\$ 34,000	\$ 34,000	0%
Total	\$ 146,675	\$ 1,680,273	1046%

Table 15 – Contractor travel / material costs and percent change for FY02 and FY03

IV. ANALYSIS OF LABOR RATES

Some additional information that was captured for all three years under consideration included man-year data for some of the cost elements. In this case the PHALANX Program Office considered man-years to be comprised of 1775 man-hours and data were presented for both government employees and contractors. From these data, labor rates were calculated to provide insight into work force costs. Example 2 shows the calculation used to determine labor rates for FY02 ISEA.

$$\frac{ISEALaborCost_{FY02}}{ISEAManYears_{FY02} * 1775 \frac{hours}{ManYear}} = \frac{\$3,009,030}{26.7 * 1775} = \frac{\$63.44}{hour}$$

Example 2

Similar to the previous section that presented changes in overall costs, this section presents a more granular view of spending patterns by isolating costs in terms of hourly labor rates for particular cost elements. The percent of change between years was calculated to provide a relative measure of the magnitude of the variance. Spreadsheets showing labor rate calculations for all three years are provided in Appendices C and D.

A. FY98 TO FY02 LABOR RATE COMPARISON

Although data for FY98 were not presented exactly as those in FY02 due to changes in cost elements, some costs were able to be compared between the years and inferences drawn from those comparisons. In addition, because some cost elements reported labor costs, but did not report associated man-years, an analysis of overall labor rates for all three years would have been inconclusive. For this reason overall labor rates are not presented in this report.

Ideally, changes in labor rates would be expected to remain relatively stable. Increases were expected due to inflation and “cost of living” pay

increases. In this case all cost data were adjusted by the PHALANX Program Office to FY02 dollars using an approximate 1.2% annual inflation rate. It was therefore expected that the only variances in labor rates would have been the result of pay increases or decreases. "Cost of living" pay increases averaged approximately 2% annually between FY98 and FY02 (constant FY02 dollars). Therefore, labor rate increases were expected to be approximately 8% for these years. FY02 to FY03 variances were expected to be approximately 4% to account for a larger annual pay increase.

Increases outside of these margins could be explained by several factors listed below:

- A higher paid work force accomplishing the same work load
- Inaccurate (e.g. low) man-year reporting
- Inaccurate (e.g. high) cost reporting
- A combination of all factors

On the other hand, decreases in labor rates outside of the 2% annual margin could indicate the opposite situation:

- A lower paid work force accomplishing the same work load
- Inaccurate (e.g. high) man-year reporting
- Inaccurate (e.g. low) cost reporting
- A combination of all factors

The following sections report the results of labor rate analysis for both government employees and contractors for FY98 and FY02.

1. Government Employee Labor Rates

A fairly large decrease was noted for NAVICP (see Table 16) corresponding to the aforementioned inability of NAVSUP to distinguish between labor performed for the PHALANX program and all other programs in FY02. The

13% increase in the Sailors element could indicate retention of senior personnel in the fleet.

<u>Cost Element</u>	<u>FY98</u>	<u>FY02</u>	<u>% Change</u>
ISEA	\$ 58.50	\$ 63.44	8%
FTSCLANT	\$ 37.33	\$ 34.85	-7%
FTSCPAC	\$ 40.58	\$ 39.07	-4%
NAVICP	\$ 65.78	\$ 37.65	-43%
PEO	\$ 56.88	\$ 51.14	-10%
Sailors	\$ 21.33	\$ 24.21	13%
Students	\$ 13.24	\$ 14.44	9%

Table 16 – Selected government employee labor rates for FY98 and FY02

2. Contractor Labor Rates

Overall contractor labor rates are shown in Table 17, however, only FTSCLANT had reported man-year data for FY98. Comparison of FTSCLANT contractor labor rates reveals the expected 8% increase.

<u>Cost Elements</u>	<u>FY98</u>	<u>FY02</u>	<u>%Change</u>
ISEA		\$ 94.18	
FTSCLANT	\$ 45.07	\$ 48.79	8%
PEO		\$ 128.14	

Table 17 – Selected contractor labor rates for FY98 and FY02

B. FY02 to FY03 Labor Rate Comparison

As stated previously, labor rate variances for the single year were expected to be approximately 2%.

1. Government Employee Labor Rates

Table 18 highlights cost element labor rates for FY02 and FY03. Between these years, the Program Office expected a 51% decrease in hourly wages. In addition, a large one year increase of 23% was noted for fleet sailors. As explained in the previous section, this increase could be a function of greater seniority in the fleet, however, the magnitude of the increase appears

extraordinary for the time frame. Although CNET and Student man-year data were unavailable⁵, it was assumed that instructor and student totals would

<u>Cost Elements</u>	<u>FY02</u>	<u>FY03</u>	<u>% Change</u>
ISEA	63.39	59.11	-7%
NWAS	100.60	78.25	-22%
FTSCLANT	35.41	35.50	0%
FTSCPAC	39.90	41.65	4%
NAVICP	37.65	38.82	3%
PEO	50.99	24.76	-51%
Sailors (1070 Billets)	24.21	29.75	23%
*CNET			3%
*Students			3%
CNSL	67.61	70.99	5%

Table 18 – Selected government employee labor rates for FY02 and FY03

remain relatively similar between the two years and the % Change in Table 18 indicates change in total cost for these two elements.

2. Contractor Labor Rates

Although ISEA appeared to have a large decrease in hourly wages (see Table 19, other cost elements reporting contractor activity appeared to have expected cost growth or slight decreases in labor rates.

<u>Cost Elements</u>	<u>FY02</u>	<u>FY03</u>	<u>% Change</u>
ISEA	\$ 88	\$ 55	-38%
FTSCLANT	\$ 43	\$ 41	-6%
PEO	\$ 107	\$ 111	4%
CNSL	\$ 88	\$ 92	5%

Table 19 – Selected contractor labor rates for FY02 and FY03

⁵ Correspondence with Mr. Ed Gohring of CNET indicated that instructor man-year data were unattainable due to an inability to determine how to allocate the labor data for this program, 13 February 2003

C. SUB-ELEMENT LABOR RATES

Additional labor rate calculations were made for all sub-elements in all three years. Comparisons are shown in Appendices C and D. On the whole the variances found among the sub-elements were wide ranging, but explanations for them should continue to fall in line with those stated previously. Increases result from lower reported man-years and higher costs, while decreases represent lowering costs and higher reported man-years. Inordinately large increases and decreases should be investigated by the respective field activity to ensure costs are accounted for properly.

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V. CONCLUSIONS

A. OVERALL COST VARIANCES

Fixed cost variance analysis appeared to be the most accurate type of examination of the cost data. The nature of the system is that funding in each area should remain relatively constant with slight adjustments for inflation, labor and increasing repair costs that result from system aging. In this case that proved to be true for most cost elements, however, a few elements and many sub-elements showed inordinate increases or decreases that could not be readily explained.

Government employee labor costs appeared relatively constant from FY98 to FY02, however, large variances in the cost elements (both favorable and unfavorable) simply offset one another. FY02 to FY03 government labor costs showed an overall increase, but labor rate analysis seemed to validate these increases.

Overall government travel and material costs decreased between FY98 and FY02 and offered little prospect for cost savings. Travel costs were relative minor and material costs decreased despite the aging system. FY02 to FY03 travel costs changes showed a similar scheme as in the earlier years, while material costs increased dramatically due to increased NAVICP material costs.

Contractor costs showed large increases through FY98 and FY02, but appeared relatively stable through FY02 to FY03. A possible underreporting of FY98 costs could be the reason. Additionally, NAVICP reported \$21.6M in contractor costs for FY98, but none for FY02. This large decrease in contractor costs coupled with the large increase in NAVICP materials costs may be linked by a difference in reporting criteria at NAVICP between the two periods.

FTSCLANT allocated costs to the contractor category, however, FTSCPAC did not. In that the FTSCs perform the same function on both coasts, it was expected that all cost categories would have similar entries. This was not the case and FTSCLANT contractor costs should be investigated and validated.

Contractor travel and materials costs were only captured for FY02 and FY03. Variances in this period were large and stemmed primarily from ISEA contractor spending increases in FY03 topping 1000% of FY02 spending. This single year increase should be validated and investigated for possible cost savings.

It is important to note that a majority of the spending changes at the cost element level were not extraordinary, yet many cost elements had sub-element spending that varied widely. This resulted in the cost element level of analysis displaying a satisfactory outcome while unjustified variances in the sub-elements created suspicion.

B. LABOR RATE VARIANCES

In a few cases for both the FY98 to FY02 period and the FY02 to FY03 period, cost element labor rates appeared to be outside of what would normally be expected. As stated in the analysis, all dollar values were adjusted for inflation to match FY02 funding. That being the case, labor rate increases could be expected to grow at approximately 2% per year to allow for pay increases. Some additional smaller increases could be attributed to changes in the labor force to include higher paid workers. Beyond that it appeared that either work-year data was underreported or cost data was over stated for the particular cost element. Although overall cost element labor rates appeared to fall in line with expectations, several of the sub-elements showed large variances and should be investigated by the field activity.

Lastly, although not specifically highlighted by the methods of analysis, the Block 0/1 difference course appears to have little future value as the Block 0 variant is phased out. As of April 2003, only 17 Block 0 mounts were in existence on 7 ships.⁶ This amounted to 25 trained sailor billets navy-wide. Although discontinuing the Block 0/1 difference course would impact these

⁶ Program Executive Office, Fleet Population Statistic

sailors, OJT by the FTSCs could supplant the need for classroom training until all Block 0 platforms were eliminated.

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VI. RECOMMENDATIONS

It is recommended that ISEA contractor travel and material costs be investigated for potential cost savings as the variances for FY02 and FY03 appear to be inordinate. It is also recommended that, although minor, FTSC/LANT contractor costs be validated to show their necessity.

Further, it is recommended that future data collection efforts continue. It was the initial hope that this study might use a linear regression analysis technique that would allow for correlation of Operational Availability (A_O) to cost data, but too few data sets were available to construct an adequate model.

Typical financial statement analysis of private sector entities offers credence to the validity of financial ratios as tools for measuring the health of a particular business unit or program. In particular, the profitability ratios paint the clearest picture of whether the company is a worthwhile venture and capable of sustaining its own life for the near term. Of these ratios, a Return on Investment (ROI) metric could help to answer the fundamental question: What is the Navy getting for its expenditures in this program?

Unlike private sector firms, the U.S. Navy invests its resources with the expected outcome being preparedness to wage sustained combat operations at sea. In the absence of a “bottom-line” figure, the A_O metric might be used in measuring how funding the various cost elements of the program affect its ability to perform as expected.

A_O is calculated from historical data to produce a percent value that represents the operational readiness or reliability of systems for the period evaluated as shown in Equation 1.

$$A_O = \frac{MTBF}{MTBF + MDT}$$

Equation 1

In this case A_O is a function of the Mean Time Between Failures (MTBF) and the Mean Down Time (MDT) for PHALANX systems in the fleet.⁷ MDT data are a combination of other factors and require calculation using the equation:

$$MDT = MTTR + MLDT + MADT$$

Equation 2

In this case MTTR is the Mean Time to Repair, MLDT is the Mean Logistics Delay Time, and MADT is the Mean Administrative Delay time.

MTTR is determined by assessing the average corrective time to repair a particular failure by dividing the total time to correct a particular failure by the number of measured failures. MLDT is defined as “the average logistic time per failure required to obtain replacement parts required to correct a failed condition.” This measure is independent of whether the part was carried on board the ship. MADT measures administrative processing delays.⁸

In order to measure the impact of a particular spending change on the entire program, an association between A_O and the cost allocations for the years studied must be generated by analyzing historical data and developing a linear equation of the form shown in Equation 3. The desire would be to witness an obvious tendency for A_O data to track directly with changes in expenditures and be able to construct such a model.

$$A_O = \beta_1 ISEA + \beta_2 FTSCCLANT + \beta_3 FTSCPCAC + \dots + \beta_n N_{CostElement}$$

Equation 3

The β coefficient could be constructed from historical data and function as the relative weight that each cost element contributes to the overall A_O percentage. As a particular β approached zero it would indicate that spending for

⁷ PHALANX RM&A Handbook, Fourth Revision, November 2002, NAVSEA

⁸ PHALANX RM&A Handbook, Fourth Revision, November 2002, NAVSEA

that cost element would have little or no effect on A_0 and thereby offer a potential area for savings.

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APPENDIX A

	FY98	FY02	FY98	FY02	FY98	FY02
Cost Element	Labor Cost	Labor Cost	Govm't Travel	Govm't Travel	Govm't Material	Govm't Material
ISEA	\$ 2,979,608	\$ 3,431,071	\$ 428,347	\$ 301,617	\$ 494,320	\$ 767,515
FTSCLANT	\$ 1,470,900	\$ 1,363,919	\$ 212,000	\$ 85,700	\$ 241,800	\$ 63,000
FTSCPAC	\$ 1,223,112	\$ 1,069,341	\$ 126,612	\$ 174,409	\$ -	\$ -
NAVICP	\$ 5,183,885	\$ 53,465	\$ -	\$ 3,000	\$ 15,300,000	\$ 7,000,000
PEO	\$ 403,865	\$ 416,302	\$ 50,000	\$ 60,000	\$ -	\$ 5,000
OEM DA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OEM Depot	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sailors	\$ 35,058,479	\$ 45,971,834	\$ -	\$ -	\$ -	\$ -
CNET	\$ 10,464,258	\$ 7,272,413	\$ -	\$ -	\$ -	\$ 2,565,714
Students	\$ 4,816,886	\$ 5,676,780	\$ -	\$ -	\$ -	\$ -
FMP	\$ 5,383,226	\$ 1,542,000	\$ -	\$ -	\$ -	\$ -
Totals	\$ 66,984,219	\$ 66,797,125	\$ 816,959	\$ 624,726	\$ 16,036,120	\$ 10,401,229

	FY98	FY02	FY98	FY02	FY98	FY02
Cost Element	Cont'r Cost	Cont'r Cost	Cont'r Trav/Mat	Cont'r Trav/Mat	\$ To Other Activity	\$ To Other Activity
ISEA	\$ 144,208	\$ 580,831	\$ -	\$ 112,675	\$ 986,427	\$ 359,815
FTSCLANT	\$ 120,000	\$ 586,000	\$ -	\$ 34,000	\$ -	\$ 63,000
FTSCPAC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NAVICP	\$ -	\$ 21,600,000	\$ -	\$ -	\$ -	\$ -
PEO	\$ 928,000	\$ 1,043,000	\$ -	\$ -	\$ -	\$ -
OEM DA	\$ 2,083,322	\$ 3,050,000	\$ -	\$ -	\$ -	\$ -
OEM Depot	\$ 11,648,452	\$ 47,069,549	\$ -	\$ -	\$ 533,968	\$ -
Sailors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CNET	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Students	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FMP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Totals	\$ 14,923,982	\$ 73,929,380	\$ -	\$ 146,675	\$ 1,520,395	\$ 422,815

	FY98	FY02	FY98	FY02	FY98	FY02
Cost Element	Sub-Total	Sub-Total	\$ From Other Act	\$ From Other Act	USN Total Cost	USN Total Cost
ISEA	\$ 5,032,910	\$ 5,553,524	\$ 74,000	\$ -	\$ 4,958,910	\$ 5,553,524
FTSCLANT	\$ 2,044,700	\$ 2,195,619	\$ 498,712	\$ 90,300	\$ 1,545,988	\$ 2,105,319
FTSCPAC	\$ 1,349,724	\$ 1,243,750	\$ 233,663	\$ -	\$ 1,116,061	\$ 1,243,750
NAVICP	\$ 20,483,885	\$ 28,656,465	\$ -	\$ -	\$ 20,483,885	\$ 28,656,465
PEO	\$ 1,381,865	\$ 1,524,302	\$ -	\$ -	\$ 1,381,865	\$ 1,524,302
OEM DA	\$ 2,083,322	\$ 3,050,000	\$ -	\$ -	\$ 2,083,322	\$ 3,050,000
OEM Depot	\$ 12,182,420	\$ 47,069,549	\$ -	\$ -	\$ 12,182,420	\$ 47,069,549
Sailors	\$ 35,058,479	\$ 45,971,834	\$ -	\$ -	\$ 35,058,479	\$ 45,971,834
CNET	\$ 10,464,258	\$ 9,838,127	\$ -	\$ -	\$ 10,464,258	\$ 9,838,127
Students	\$ 4,816,886	\$ 5,676,780	\$ -	\$ -	\$ 4,816,886	\$ 5,676,780
FMP	\$ 5,383,226	\$ 1,542,000	\$ -	\$ -	\$ 5,383,226	\$ 1,542,000
Totals	\$ 100,281,675	\$ 152,321,950	\$ 806,375	\$ 90,300	\$ 99,475,300	\$ 152,231,650

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APPENDIX B

	FY02	FY03	FY02	FY03	FY02	FY03
Cost Element	Labor Cost	Labor Cost	Govm't Travel	Govm't Travel	Govm't Material	Govm't Material
ISEA	\$ 3,431,071	\$ 4,521,920	\$ 301,617	\$ 177,542	\$ 767,515	\$ 437,920
NWAS	\$ 200,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -
FTSCLANT	\$ 1,363,919	\$ 1,455,469	\$ 85,700	\$ 105,000	\$ 63,000	\$ 63,000
FTSCPAC	\$ 1,069,341	\$ 1,115,382	\$ 174,409	\$ 186,261	\$ -	\$ -
NAVICP	\$ 53,465	\$ 55,125	\$ 3,000	\$ 3,500	\$ 7,000,000	\$ 35,410,000
PEO	\$ 416,302	\$ 443,963	\$ 60,000	\$ 60,000	\$ 5,000	\$ 5,000
OEM DA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OEM Depot	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sailors	\$ 45,971,834	\$ 56,507,932	\$ -	\$ -	\$ -	\$ -
CNET	\$ 7,272,413	\$ 7,490,586	\$ -	\$ -	\$ 2,565,714	\$ 2,642,686
Students	\$ 5,676,780	\$ 5,847,082	\$ -	\$ -	\$ -	\$ -
FMP	\$ 1,542,000	\$ 4,773,000	\$ -	\$ -	\$ -	\$ -
CNSP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,220,318
CNSL	\$ -	\$ 63,000	\$ -	\$ -	\$ -	\$ 205,500
Totals	\$ 66,997,125	\$ 82,523,459	\$ 624,726	\$ 532,303	\$ 10,401,229	\$ 48,984,424

Cost Element	Cont'r Cost	Cont'r Cost	Cont'r Trav/Mat	Cont'r Trav/Mat	\$ To Other Activity	\$ To Other Activity
ISEA	\$ 580,831	\$ 1,013,000	\$ 112,675	\$ 1,646,273	\$ 359,815	\$ 110,000
NWAS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FTSCLANT	\$ 586,000	\$ 375,000	\$ 34,000	\$ 34,000	\$ 63,000	\$ 63,000
FTSCPAC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NAVICP	\$ 21,600,000	\$ -	\$ -	\$ -	\$ -	\$ -
PEO	\$ 1,043,000	\$ 1,080,650	\$ -	\$ -	\$ -	\$ -
OEM DA	\$ 3,050,000	\$ 3,025,000	\$ -	\$ -	\$ -	\$ -
OEM Depot	\$ 47,069,549	\$ 58,199,000	\$ -	\$ -	\$ -	\$ -
Sailors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CNET	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Students	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FMP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CNSP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CNSL	\$ -	\$ 245,000	\$ -	\$ -	\$ -	\$ 64,000
Totals	\$ 73,929,380	\$ 63,937,650	\$ 146,675	\$ 1,680,273	\$ 422,815	\$ 237,000

Cost Element	Sub-Total	Sub-Total	\$ From Other Act	\$ From Other Act	USN Total Cost	USN Total Cost
ISEA	\$ 5,553,524	\$ 7,916,607	\$ -	\$ -	\$ 5,553,524	\$ 7,916,607
NWAS	\$ 200,000	\$ 250,000	\$ -	\$ -	\$ 200,000	\$ 250,000
FTSCLANT	\$ 2,195,619	\$ 2,095,469	\$ 90,300	\$ 90,300	\$ 2,105,319	\$ 2,005,169
FTSCPAC	\$ 1,243,750	\$ 1,301,643	\$ -	\$ -	\$ 1,243,750	\$ 1,301,643
NAVICP	\$ 28,656,465	\$ 35,468,625	\$ -	\$ -	\$ 28,656,465	\$ 35,468,625
PEO	\$ 1,524,302	\$ 1,589,613	\$ -	\$ -	\$ 1,524,302	\$ 1,589,613
OEM DA	\$ 3,050,000	\$ 3,025,000	\$ -	\$ -	\$ 3,050,000	\$ 3,025,000
OEM Depot	\$ 47,069,549	\$ 58,199,000	\$ -	\$ -	\$ 47,069,549	\$ 58,199,000
Sailors	\$ 45,971,834	\$ 56,507,832	\$ -	\$ -	\$ 45,971,834	\$ 56,507,832
CNET	\$ 9,838,127	\$ 10,133,272	\$ -	\$ -	\$ 9,838,127	\$ 10,133,272
Students	\$ 5,676,780	\$ 5,847,082	\$ -	\$ -	\$ 5,676,780	\$ 5,847,082
FMP	\$ 1,542,000	\$ 4,773,000	\$ -	\$ -	\$ 1,542,000	\$ 4,773,000
CNSP	\$ -	\$ 10,220,318	\$ -	\$ -	\$ -	\$ 10,220,318
CNSL	\$ -	\$ 577,500	\$ -	\$ -	\$ -	\$ 577,500
Totals	\$ 152,521,950	\$ 197,904,961	\$ 90,300	\$ 90,300	\$ 152,431,650	\$ 197,814,661

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APPENDIX C

Cost Elements/Sub-Elements	FY02 Total Wk/Yr	FY98 Total Wk/Yr	FY02 Labor Cost	FY98 Labor Cost	FY02 Hourly Labor Rate	FY98 Hourly Labor Rate	%Change in Labor Rates
ISEA							
Program Management	3.1	2.6	\$ 345,261	\$ 271,825	\$ 62.75	\$ 58.90	7%
Systems Eng/Fleet Support	15.0	6.4	\$ 1,692,982	\$ 672,241	\$ 63.59	\$ 58.90	8%
Acquisition Management	1.3	0.9	\$ 143,347	\$ 94,093	\$ 62.12	\$ 58.90	5%
Integrated Logistics Support	2.3	4.0	\$ 258,540	\$ 417,145	\$ 63.33	\$ 58.90	8%
Configuration Management	1.2	0.7	\$ 135,973	\$ 71,092	\$ 63.84	\$ 58.90	8%
Core Sub-Total	22.9	14.6	\$ 2,576,103	\$ 1,526,396	\$ 63.38	\$ 58.90	8%
CIWS-AEGIS Eng Support	0.5	1.9	\$ 56,000	\$ 198,641	\$ 64.39	\$ 58.90	9%
CIWS LOCO	2.8	2.6	\$ 316,952	\$ 245,687	\$ 63.77	\$ 54.28	17%
Foreign Military Sales	0.0	7.4	\$ -	\$ 770,516			
FMP Support	0.3	2.5	\$ 32,831	\$ 261,369	\$ 63.78	\$ 58.90	8%
NAVICP Support	0.2	0.4	\$ 27,144	\$ 42,864	\$ 63.72	\$ 58.90	8%
Non-Core Sub-Total	3.8	14.7	\$ 432,927	\$ 1,519,077	\$ 63.85	\$ 58.10	10%
ISEASub-total	26.7	29.3	\$ 3,009,030	\$ 3,045,473	\$ 63.44	\$ 58.50	8%
FTSCLANT (Norfolk) (FY 02 plan)							
Tech Assist	9.3	16.6	\$ 587,330	\$ 1,103,500	\$ 35.58	\$ 37.45	-5%
Fleet Modernization	0.5	0.2	\$ 39,400	\$ 13,400	\$ 44.39	\$ 37.75	18%
ILS/Planned Maintenance	1.0	1.4	\$ 78,700	\$ 93,800	\$ 44.34	\$ 37.75	17%
FTSC Norfolk Sub-Total	10.8	18.2	\$ 705,430	\$ 1,210,700	\$ 36.80	\$ 37.48	-2%
FTSCLANT (Mayport) (FY 02 plan)							
Tech Assist	1.7	2.0	\$ 104,622	\$ 128,000	\$ 34.67	\$ 36.06	-4%
Fleet Modernization	0.3	0.0	\$ 9,382	\$ -	\$ 17.62		
ILS/Planned Maintenance	0.0	0.2	\$ -	\$ 13,400		\$ 37.75	-100%
FTSC Mayport Sub-Total	2.0	2.2	\$ 114,004	\$ 141,400	\$ 32.11	\$ 36.21	-11%
FTSCLANT (Naples) (FY 02 plan)							
Tech Assist	1.0	1.6	\$ 34,140	\$ 105,400	\$ 19.23	\$ 37.11	-48%
Fleet Modernization	0.0	0.2	\$ -	\$ 13,400		\$ 37.75	-100%
ILS/Planned Maintenance	0.0	0.0	\$ -	\$ -			
FTSC Naples Sub-Total	1.0	1.8	\$ 34,140	\$ 118,800	\$ 19.23	\$ 37.18	-48%
FTSCLANT Sub-Total	13.8	22.2	\$ 853,574	\$ 1,470,900	\$ 34.85	\$ 37.33	-7%
FTSCPAC (San Diego)							
Tech Assist	4.3	4.8	\$ 335,456	\$ 357,331	\$ 43.95	\$ 42.38	4%
Operational Assessment	2.4	3.5	\$ 186,134	\$ 236,702	\$ 43.69	\$ 38.10	15%
Fleet Modernization	0.2	2.6	\$ 7,715	\$ 173,290	\$ 21.73	\$ 38.29	-43%
Condition Assessment	0.4	1.1	\$ 31,101	\$ 78,729	\$ 43.80	\$ 40.32	9%
ILS/Planned Maintenance	1.5	1.5	\$ 124,441	\$ 88,043	\$ 46.74	\$ 33.51	39%
FTSC San Diego Sub-Total	8.8	13.4	\$ 684,847	\$ 934,095	\$ 43.84	\$ 39.33	11%
FTSCPAC (Everett)							
Tech Assist	1.3	0.2	\$ 64,731	\$ 17,798	\$ 28.05	\$ 50.14	-44%
Operational Assessment	0.6	0.1	\$ 27,201	\$ 8,899	\$ 25.54	\$ 50.14	-49%
Fleet Modernization	0.0	0.2	\$ -	\$ 14,861		\$ 41.86	-100%
Condition Assessment	0.1	0.1	\$ 4,792	\$ 8,899	\$ 27.00	\$ 50.14	-46%
ILS/Planned Maintenance	0.0	0.0	\$ 498	\$ -			
FTSC Everett Sub-Total	2.0	0.6	\$ 97,222	\$ 50,457	\$ 27.39	\$ 47.38	-42%
FTSCPAC (Pearl Harbor)							
Tech Assist	2.5	1.4	\$ 199,393	\$ 106,093	\$ 44.93	\$ 42.69	5%
Operational Assessment	0.0	0.5	\$ -	\$ 42,273		\$ 47.63	-100%
Fleet Modernization	0.0	0.2	\$ -	\$ 14,675		\$ 41.34	-100%
Condition Assessment	0.0	0.1	\$ -	\$ 4,327		\$ 24.38	-100%
ILS/Planned Maintenance	0.0	0.0	\$ -	\$ -			
FTSC Pearl Harbor Sub-Total	2.5	2.2	\$ 199,393	\$ 167,368	\$ 44.93	\$ 42.86	5%
FTSCPAC (Yoko/Saesbo)							
Tech Assist	1.3	0.4	\$ 35,589	\$ 35,596	\$ 15.42	\$ 50.14	-69%
Operational Assessment	0.1	0.2	\$ 1,284	\$ 17,798	\$ 7.23	\$ 50.14	-86%
Fleet Modernization	0.0	0.2	\$ -	\$ 17,798		\$ 50.14	-100%
Condition Assessment	0.0	0.0	\$ -	\$ -			
ILS/Planned Maintenance	0.0	0.0	\$ 1,006	\$ -			
FTSC Yoko Sub-Total	1.4	0.8	\$ 37,879	\$ 71,192	\$ 15.24	\$ 50.14	-70%
FTSCPAC (Singapore)							
FTSCPAC Sub-Total	14.7	17.0	\$ 1,019,341	\$ 1,223,112	\$ 39.07	\$ 40.58	-4%
NAVICP (FY 02)							
NAVICP Sub-Total	0.8	44.4	\$ 53,465	\$ 5,183,885	\$ 37.65	\$ 65.78	-43%

Cost Elements/Sub-Elements	FY02 Total Wk/Yr	FY98 Total Wk/Yr	FY02 Labor Cost	FY98 Labor Cost	FY02 Hourly Labor Rate	FY98 Hourly Labor Rate	% Change in Labor Rates
PEO(EXW)/NAVSEA							
Acquisition Mgmt	1.2	2.0	\$ 122,609	\$ 177,037	\$ 57.56	\$ 49.87	15%
Engineering Mgmt	0.2	1.0	\$ 20,867	\$ 88,518	\$ 58.78	\$ 49.87	18%
Fleet Support	1.6	1.0	\$ 128,863	\$ 138,310	\$ 45.37	\$ 77.92	-42%
PEO Sub-Total	3.0	4.0	\$ 272,339	\$ 403,865	\$ 51.14	\$ 56.88	-10%
Raytheon, Tucson (FY 02 Budget)							
Design Agent Engineering Svcs	0.0	0.0					
OEM DA Sub-Total	0.0	0.0	\$ -	\$ -			
Raytheon, Louisville (FY 02 plan)							
Depot	0.0	0.0		\$ -			
OEM Depot Sub-Total	0.0	0.0	\$ -	\$ -			
Shipboard Manning							
Shipboard Manning (1070 Billets)	1070.0	926.0	\$ 45,971,834	\$ 35,058,479	\$ 24.21	\$ 21.33	13%
Sailors Sub-Total	1070.0	926.0	\$ 45,971,834	\$ 35,058,479	\$ 24.21	\$ 21.33	13%
CNET							
Blk 0/I Dif Course Cost (SD)			\$ 30,384	\$ 84,777			
Blk I Course Cost (SD)			\$ 3,080,152	\$ 2,771,776			
Blk I Course Cost (DN)			\$ 4,161,877	\$ 7,176,113			
CNET Sub-Total	0.0	0.0	\$ 7,272,413	\$ 10,032,666			
Blk 0/I Dif Course Student Pay (SD)			\$ 122,112	\$ 90,101			
Blk I Course Cost (SD)			\$ 2,930,652	\$ 2,161,684			
Blk I Course Cost (DN)			\$ 2,624,016	\$ 2,106,405			
Students Sub-Total	221.5	185.5	\$ 5,676,780	\$ 4,358,190	\$ 14.44	\$ 13.24	9%
Program Total (w/o Man/students)	59.0	116.9	\$ 12,480,162	\$ 21,359,901	\$ 119.13	\$ 102.93	16%
Program Total (w/Manning)	1350.5	1228.4	\$ 64,128,776	\$ 60,776,570	\$ 26.75	\$ 27.87	-4%

Cost Elements/Sub-Elements	FY02 Gov't Travel	FY98 Gov't Travel	FY02 Gov't Material	FY98 Gov't Material	% Changes in Gov't Material
ISEA					
Program Management	\$ -	\$ 14,000	\$ 16,045	\$ 22,674	-29%
Systems Eng/Fleet Support	\$ 219,418	\$ 33,356	\$ -	\$ -	
Acquisition Management	\$ -	\$ 7,500	\$ -	\$ -	
Integrated Logistics Support	\$ 13,936	\$ 16,500	\$ -	\$ -	
Configuration Management	\$ -	\$ 1,000	\$ -	\$ -	
Core Sub-Total	\$ 233,354	\$ 72,356	\$ 16,045	\$ 22,674	-29%
CIWS-AEGIS Eng Support	\$ 4,875	\$ 8,000	\$ -	\$ 31,151	-100%
CIWS LOCO	\$ -	\$ 215,224	\$ 329,409	\$ -	
Foreign Military Sales					
FMP Support	\$ -	\$ 15,000	\$ 31,993	\$ -	
NAVICP Support	\$ -	\$ -	\$ -	\$ -	
Non-Core Sub-Total	\$ 4,875	\$ 238,224	\$ 361,402	\$ 31,151	1060%
ISEA Sub-Total	\$ 238,229	\$ 310,580	\$ 377,447	\$ 53,825	601%
FTSCLANT (Norfolk) (FY 02 plan)					
Tech Assist	\$ 45,000	\$ 100,000	\$ -	\$ 241,800	-100%
Fleet Modernization	\$ -	\$ -	\$ 53,000	\$ -	
ILS/Planned Maintenance	\$ 5,000	\$ 8,000	\$ -	\$ -	
FTSC Norfolk Sub-Total	\$ 50,000	\$ 108,000	\$ 53,000	\$ 241,800	-78%
FTSCLANT (Mayport) (FY 02 plan)					
Tech Assist	\$ 10,000	\$ 48,000	\$ -	\$ -	
Fleet Modernization	\$ -	\$ -	\$ 10,000	\$ -	
ILS/Planned Maintenance	\$ -	\$ -	\$ -	\$ -	
FTSC Mayport Sub-Total	\$ 10,000	\$ 48,000	\$ 10,000	\$ -	
FTSCLANT (Naples) (FY 02 plan)					
Tech Assist	\$ 25,700	\$ 56,000			
Fleet Modernization	\$ -	\$ -			
ILS/Planned Maintenance	\$ -	\$ -			
FTSC Naples Sub-Total	\$ 25,700	\$ 56,000			
FTSCLANT Sub-Total	\$ 85,700	\$ 212,000	\$ 63,000	\$ 241,800	-74%
FTSCPAC (San Diego)					
Tech Assist	\$ 39,691	\$ 35,733			
Operational Assessment	\$ 18,801	\$ 23,670			
Fleet Modernization	\$ -	\$ 23,009			
Condition Assessment	\$ 8,777	\$ 7,873			
ILS/Planned Maintenance	\$ 42,734	\$ 7,424			
FTSC San Diego Sub-Total	\$ 110,003	\$ 97,709			
FTSCPAC (Everett)					
Tech Assist	\$ 14,954	\$ 1,780			
Operational Assessment	\$ 9,997	\$ 890			
Fleet Modernization	\$ -	\$ 1,486			
Condition Assessment	\$ -	\$ 890			
ILS/Planned Maintenance	\$ 283	\$ -			
FTSC Everett Sub-Total	\$ 25,234	\$ 5,046			
FTSCPAC (Pearl Harbor)					
Tech Assist	\$ 11,076	\$ 10,609			
Operational Assessment	\$ 3,110	\$ 4,227			
Fleet Modernization	\$ -	\$ 1,468			
Condition Assessment	\$ -	\$ 433			
ILS/Planned Maintenance	\$ -	\$ -			
FTSC Pearl Harbor Sub-Total	\$ 14,186	\$ 16,737			
FTSCPAC (Yoko/Saesbo)					
Tech Assist	\$ 15,357	\$ 3,560			
Operational Assessment	\$ 9,629	\$ 1,780			
Fleet Modernization	\$ -	\$ 1,780			
Condition Assessment	\$ -	\$ -			
ILS/Planned Maintenance	\$ -	\$ -			
FTSC Yoko Sub-Total	\$ 24,986	\$ 7,120			
FTSCPAC (Singapore)					
FTSC Sub-Total	\$ 174,409	\$ 126,612			
NAVICP (FY 02)					
NAVICP Sub-Total	\$ 3,000	\$ -	\$ 7,000,000	\$ 15,300,000	-54%

Cost Elements/Sub-Elements	FY02 Gov't Travel	FY98 Gov't Travel	FY02 Gov't Material	FY98 Gov't Material	% Changes in Gov't Material
PEO(EXW)/NAVSEA					
Acquisition Mgmt	\$ 11,000	\$ 50,000	\$ 1,000		
Engineering Mgmt	\$ 11,000		\$ 1,000		
Fleet Support	\$ 16,000		\$ 1,000		
PEO Sub-Total	\$ 38,000	\$ 50,000	\$ 3,000	\$ -	
Raytheon, Tucson (FY 02 Budget)					
Design Agent Engineering Svcs		\$ -		\$ -	
OEM DA Sub-Total		\$ -		\$ -	
Raytheon, Louisville (FY 02 plan)					
Depot		\$ -		\$ -	
OEM Depot Sub-Total		\$ -		\$ -	
Shipboard Manning					
Shipboard Manning (1070 Billets)		\$ -		\$ -	
Sailors Sub-Total		\$ -		\$ -	
CNET					
Blk 0/I Dif Course Cost (SD)		\$ -	\$ 23,568	\$ -	
Blk I Course Cost (SD)	\$ -	\$ -	\$ 1,006,392	\$ -	
Blk I Course Cost (DN)	\$ -	\$ -	\$ 1,535,754	\$ -	
CNET Sub-Total		\$ -	\$ 2,565,714	\$ -	
Blk 0/I Dif Course Student Pay (SD)					
Blk I Course Cost (SD)	\$ -		\$ -		
Blk I Course Cost (DN)	\$ -		\$ -		
Students Sub-Total					
Program Total (w/o Man/students)	\$ 539,338	\$ 699,192	\$ 10,009,161	\$ 15,595,625	-36%
Program Total (w/Manning)	\$ 539,338	\$ 699,192	\$ 10,009,161	\$ 15,595,625	-36%

Cost Elements/Sub-Elements	FY02 Cont'r Wk/Yr	FY98 Cont'r Wk/Yr	FY02 Cont'r Cost	FY98 Cont'r Cost	FY02 Cont'r Hourly Labor Rate	FY98 Cont'r Hourly Labor Rate	% Change in Cont'r Labor Rates
ISEA							
Program Management	0.0	0.0	\$ -	\$ -			
Systems Eng/Fleet Support	2.0	0.0	\$ 393,135	\$ -	\$ 110.74		100%
Acquisition Management	0.0	0.0	\$ -	\$ -			
Integrated Logistics Support	1.2	0.0	\$ 141,798	\$ -	\$ 66.57		100%
Configuration Management	0.0	0.0	\$ -	\$ -			
Core Sub-Total	3.2	0.0	\$ 534,933	\$ -	\$ 177.31	\$ -	100%
CIWS-AEGIS Eng Support	0.0	0.0	\$ -	\$ -			
CIWS LOCO	0.0	0.0	\$ -	\$ -			
Foreign Military Sales	0.0	0.0					
FMP Support	0.0	0.0	\$ -	\$ -			
NAVICP Support	0.0	0.0	\$ -	\$ -			
Non-Core Sub-Total	0.0	0.0	\$ -	\$ -			
ISEA Sub-Total	\$ 3	\$ -	\$ 534,933	\$ -	\$ 94.18		100%
FTSCLANT (Norfolk) (FY 02 plan)							
Tech Assist	0.0	1.5	\$ 6,000	\$ 120,000		\$ 45.07	
Fleet Modernization	4.8	0.0	\$ 410,000	\$ -	\$ 48.12		100%
ILS/Planned Maintenance	0.0	0.0	\$ -	\$ -			
FTSC Norfolk Sub-Total	4.8	1.5	\$ 416,000	\$ 120,000	\$ 48.83	\$ 45.07	8%
FTSCLANT (Mayport) (FY 02 plan)							
Tech Assist	0.0	0.0	\$ -	\$ -			
Fleet Modernization	0.0	0.0	\$ -				
ILS/Planned Maintenance	0.2	0.0	\$ 17,000		\$ 47.89		100%
FTSC Mayport Sub-Total	0.2	0.0	\$ 17,000	\$ -	\$ 47.89		100%
FTSCLANT (Naples) (FY 02 plan)							
Tech Assist							
Fleet Modernization							
ILS/Planned Maintenance							
FTSC Naples Sub-Total							
FTSCLANT Sub-Total	\$ 5	\$ 2	\$ 433,000	\$ 120,000	\$ 48.79	\$ 45.07	8%
FTSCPAC (San Diego)							
Tech Assist							
Operational Assessment							
Fleet Modernization							
Condition Assessment							
ILS/Planned Maintenance							
FTSC San Diego Sub-Total							
FTSCPAC (Everett)							
Tech Assist							
Operational Assessment							
Fleet Modernization							
Condition Assessment							
ILS/Planned Maintenance							
FTSC Everett Sub-Total							
FTSCPAC (Pearl Harbor)							
Tech Assist							
Operational Assessment							
Fleet Modernization							
Condition Assessment							
ILS/Planned Maintenance							
FTSC Pearl Harbor Sub-Total							
FTSCPAC (Yoko/Saesbo)							
Tech Assist							
Operational Assessment							
Fleet Modernization							
Condition Assessment							
ILS/Planned Maintenance							
FTSC Yoko Sub-Total							
FTSCPAC (Singapore)							
FTSCPAC Sub-Total							
NAVICP (FY 02)							
NAVICP Sub-Total		0.0	\$ 21,600,000	\$ -			

Cost Elements/Sub-Elements	FY02 Cont'r Wk/Yr	FY98 Cont'r Wk/Yr	FY02 Cont'r Cost	FY98 Cont'r Cost	FY02 Cont'r Hourly Labor Rate	FY98 Cont'r Hourly Labor Rate	% Change in Cont'r Labor Rates
PEO(EXW)/NAVSEA							
Acquisition Mgmt	1.0		\$ 156,333	\$ 928,000	\$ 88.07		100%
Engineering Mgmt	2.0		\$ 526,000		\$ 148.17		100%
Fleet Support	0.0						
PEO Sub-Total	3.0	0.0	\$ 682,333	\$ 928,000	\$ 128.14		100%
Raytheon, Tucson (FY 02 Budget)							
Design Agent Engineering Srves		0.0	\$ 3,050,000	\$ 2,083,322			
OEM DA Sub-Total		0.0	\$ 3,050,000	\$ 2,083,322			
Raytheon, Louisville (FY 02 plan)							
Depot		0.0	\$ 47,069,549	\$ 11,648,452			
OEM Depot Sub-Total		0.0	\$ 47,069,549	\$ 11,648,452			
Shipboard Manning							
Shipboard Manning (1070 Billets)		0.0		\$ -			
Sailors Sub-Total		0.0		\$ -			
CNET							
Blk 0/I Dif Course Cost (SD)				\$ -			
Blk I Course Cost (SD)	0.0	0.0	\$ -	\$ -			
Blk I Course Cost (DN)	0.0	0.0	\$ -	\$ -			
CNET Sub-Total		0.0		\$ -			
Blk 0/I Dif Course Student Pay (SD)							
Blk I Course Cost (SD)	0.0		\$ -				
Blk I Course Cost (DN)	0.0		\$ -				
Students Sub-Total				\$ -			
Program Total (w/o Man/students)	3.0	1.5	\$ 73,369,815	\$ 14,779,774	\$ 13,778	\$ 5,551	100%
Program Total (w/Manning)	3.0	1.5	\$ 73,369,815	\$ 14,779,774	\$ 13,778	\$ 5,551	100%

Cost Elements/Sub-Elements	FY02 Contr Trav/Mat	FY98 Contr Trav/Mat	FY02 \$ To Other Activity	FY98 \$ To Other Activity	FY02 \$ From Other Activity	FY98 \$ From Other Activity	FY02 USN Total Cost	FY98 USN Total Cost	% Change in Total Cost
ISEA									
Program Management	\$ 42,704	\$ -	\$ -	\$ -	\$ -		\$ 404,010	\$ 308,499	31%
Systems Eng/Fleet Support	\$ 1,787	\$ -	\$ 133,260	\$ -	\$ -		\$ 2,440,582	\$ 705,597	246%
Acquisition Management	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 143,347	\$ 101,593	41%
Integrated Logistics Support	\$ 62,901	\$ -	\$ -	\$ -	\$ -		\$ 477,175	\$ 433,645	10%
Configuration Management	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 135,973	\$ 72,092	89%
Core Sub-Total	\$ 107,392	\$ -	\$ 133,260	\$ -	\$ -	\$ -	\$ 3,601,087	\$ 1,621,426	122%
CIWS-AEGIS Eng Support	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 60,875	\$ 237,792	-74%
CIWS LOCO	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 646,361	\$ 460,911	40%
Foreign Military Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 770,516	
FMP Support	\$ 415	\$ -	\$ 24,556	\$ 774,405	\$ -		\$ 89,795	\$ 1,050,774	-91%
NAVICP Support	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 27,144	\$ 42,864	-37%
Non-Core Sub-Total	\$ 415	\$ -	\$ 24,556	\$ 774,405	\$ -	\$ -	\$ 824,175	\$ 2,562,857	-68%
ISEA Sub-Total	\$ 107,807	\$ -	\$ 157,816	\$ 774,405	\$ -	\$ -	\$ 4,425,262	\$ 4,184,283	6%
FTSCLANT (Norfolk) (FY 02 plan)									
Tech Assist	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 498,712	\$ 638,330	\$ 2,064,012	-69%
Fleet Modernization	\$ 34,000	\$ -	\$ -	\$ -	\$ 90,300	\$ -	\$ 626,700	\$ 13,400	4577%
ILS/Planned Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 83,700	\$ 101,800	-18%
FTSC Norfolk Sub-Total	\$ 34,000	\$ -	\$ -	\$ -	\$ 90,300	\$ 498,712	\$ 1,348,730	\$ 2,179,212	-38%
FTSCLANT (Mayport) (FY 02 plan)									
Tech Assist	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 114,622	\$ 176,000	-35%
Fleet Modernization	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 19,382	\$ -	
ILS/Planned Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,000	\$ 13,400	27%
FTSC Mayport Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 151,004	\$ 189,400	-20%
FTSCLANT (Naples) (FY 02 plan)									
Tech Assist					\$ -		\$ 59,840	\$ 161,400	
Fleet Modernization					\$ -		\$ -	\$ 13,400	
ILS/Planned Maintenance					\$ -		\$ -	\$ -	
FTSC Naples Sub-Total					\$ -		\$ 59,840	\$ 174,800	-66%
FTSCLANT Sub-Total	\$ 34,000	\$ -	\$ -	\$ -	\$ 90,300	\$ 498,712	\$ 1,559,574	\$ 2,543,412	-39%
FTSCPAC (San Diego)									
Tech Assist				\$ -		\$ 206,163	\$ 375,147	\$ 599,227	-37%
Operational Assessment				\$ -			\$ 204,935	\$ 260,372	
Fleet Modernization				\$ -		\$ 27,500	\$ 7,715	\$ 223,799	-97%
Condition Assessment				\$ -			\$ 39,878	\$ 86,602	
ILS/Planned Maintenance				\$ -			\$ 167,175	\$ 95,467	
FTSC San Diego Sub-Total				\$ -		\$ 233,663	\$ 794,850	\$ 1,265,467	-37%
FTSCPAC (Everett)									
Tech Assist							\$ 79,685	\$ 19,578	
Operational Assessment				\$ -			\$ 37,198	\$ 9,789	
Fleet Modernization				\$ -			\$ -	\$ 16,347	
Condition Assessment				\$ -			\$ 4,792	\$ 9,789	
ILS/Planned Maintenance				\$ -			\$ 781	\$ -	
FTSC Everett Sub-Total				\$ -			\$ 122,456	\$ 55,503	121%
FTSCPAC (Pearl Harbor)									
Tech Assist				\$ -			\$ 210,469	\$ 116,702	
Operational Assessment				\$ -			\$ 3,110	\$ 46,500	
Fleet Modernization				\$ -			\$ -	\$ 16,143	
Condition Assessment				\$ -			\$ -	\$ 4,760	
ILS/Planned Maintenance				\$ -			\$ -	\$ -	
FTSC Pearl Harbor Sub-Total				\$ -			\$ 213,579	\$ 184,105	16%
FTSCPAC (Yoko/Saesbo)									
Tech Assist				\$ -			\$ 50,946	\$ 39,156	
Operational Assessment				\$ -			\$ 10,913	\$ 19,578	
Fleet Modernization				\$ -			\$ -	\$ 19,578	
Condition Assessment				\$ -			\$ -	\$ -	
ILS/Planned Maintenance				\$ -			\$ 1,006	\$ -	
FTSC Yoko Sub-Total				\$ -			\$ 62,865	\$ 78,312	-20%
FTSCPAC (Singapore)									
FTSCPAC Sub-Total				\$ -		\$ 233,663	\$ 1,193,750	\$ 1,583,387	-25%
NAVICP (FY 02)									
NAVICP Sub-Total		\$ -		\$ -		\$ -	\$ 28,656,465	\$ 20,483,885	40%

Cost Elements/Sub-Elements	FY02 Contr Trav/Mat	FY98 Contr Trav/Mat	FY02 \$ To Other Activity	FY98 \$ To Other Activity	FY02 \$ From Other Activity	FY98 \$ From Other Activity	FY02 USN Total Cost	FY98 USN Total Cost	% Change in Total Cost
PEO(EXW)/NAVSEA							\$ -	\$ -	
Acquisition Mgmt	\$ -		\$ -		\$ -		\$ 290,942	\$ 1,155,037	-75%
Engineering Mgmt	\$ -		\$ -		\$ -		\$ 558,867	\$ 88,518	531%
Fleet Support	\$ -		\$ -		\$ -		\$ 145,863	\$ 138,310	5%
PEO Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 995,672	\$ 1,381,865	-28%
Raytheon, Tucson (FY 02 Budget)							\$ -	\$ -	
Design Agent Engineering Svcs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,050,000		
OEM DA Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 3,050,000	\$ 2,083,322	46%
Raytheon, Louisville (FY 02 plan)							\$ -	\$ -	
Depot	\$ -	\$ -	\$ -	\$ 533,968	\$ -	\$ -	\$ 47,069,549	\$ 12,182,420	286%
OEM Depot Sub-Total	\$ -	\$ -	\$ -	\$ 533,968	\$ -	\$ -	\$ 47,069,549	\$ 12,182,420	286%
Shipboard Manning							\$ -	\$ -	
Shipboard Manning (1070 Billets)		\$ -		\$ -		\$ -	\$ 45,971,834	\$ 35,058,479	31%
Sailors Sub-Total		\$ -		\$ -			\$ 45,971,834	\$ 35,058,479	31%
CNET							\$ -	\$ -	
Blk 0/I Dif Course Cost (SD)		\$ -		\$ -		\$ -	\$ 53,952	\$ 84,777	-36%
Blk I Course Cost (SD)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,086,544	\$ 2,771,776	47%
Blk I Course Cost (DN)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,697,631	\$ 7,176,113	-21%
CNET Sub-Total		\$ -		\$ -			\$ 9,838,127	\$ 10,032,666	-2%
Blk 0/I Dif Course Student Pay (SD)							\$ 122,112	\$ 90,101	36%
Blk I Course Cost (SD)	\$ -		\$ -		\$ -		\$ 2,930,652	\$ 2,161,684	36%
Blk I Course Cost (DN)	\$ -		\$ -		\$ -		\$ 2,624,016	\$ 2,106,405	25%
Students Sub-Total							\$ 5,676,780	\$ 4,358,190	30%
Program Total (w/o Man/students)	\$ 141,807	\$ -	\$ 157,816	\$ 1,308,373	\$ 90,300	\$ 732,375	\$ 96,788,399	\$ 54,475,240	78%
Program Total (w/Manning)	\$ 141,807	\$ -	\$ 157,816	\$ 1,308,373	\$ 90,300	\$ 732,375	\$ 148,437,013	\$ 93,891,909	58%

APPENDIX D

Cost Elements/Sub-Elements	FY03 Total Wk/Yr	FY02 Total Wk/Yr	FY03 Labor Cost	FY02 Labor Cost	FY03 Labor Rates	FY02 Labor Rates	% Change in Labor Rates
ISEA							
Program Management	3.9	3.1	\$ 487,970	\$ 345,261	\$ 70	\$ 63	12%
Systems Eng/Fleet Support	11.6	15.0	\$ 1,451,398	\$ 1,692,982	\$ 70	\$ 64	11%
Acquisition Management	1.7	1.3	\$ 212,705	\$ 143,347	\$ 70	\$ 62	13%
Computer Resources	4.6	2.3	\$ 550,530	\$ 254,687	\$ 67	\$ 62	8%
Integrated Logistics Support	3.8	2.3	\$ 475,458	\$ 258,540	\$ 70	\$ 63	11%
Configuration Management	1.4	1.2	\$ 175,169	\$ 135,973	\$ 70	\$ 64	10%
Core Sub-Total	27.0	25.2	\$ 3,353,230	\$ 2,830,790	\$ 70	\$ 63	11%
CIWS-AEGIS Eng Support	0.9	0.5	\$ 106,352	\$ 56,000	\$ 67	\$ 64	3%
CIWS LOCO	1.4	2.8	\$ 172,666	\$ 316,952	\$ 69	\$ 64	9%
CIWS Block 0 AIT Upgrade	1.3	0.5	\$ 167,661	\$ 60,413	\$ 73	\$ 64	14%
Foreign Military Sales	6.7	0.0	\$ -	\$ -	\$ -	\$ -	0%
CIWS MODs	0.8	0.3	\$ 103,850	\$ 32,064	\$ 73	\$ 65	13%
NAVICP Support	0.1	0.2	\$ 6,200	\$ 27,144	\$ 35	\$ 64	-45%
CIWS FMP SHIPALT Support	4.9	0.7	\$ 611,961	\$ 74,877	\$ 70	\$ 64	10%
Non-Core Sub-Total	16.1	5.0	\$ 1,168,690	\$ 567,450	\$ 41	\$ 64	-36%
ISEA Sub-Total	43.1	30.2	\$ 4,521,920	\$ 3,398,240	\$ 59	\$ 63	-7%
NWAS							
TE Certification/MRDB Efforts	1.8	2.1	\$ 250,000	\$ 375,000	\$ 78	\$ 101	-22%
Sub-Total	1.8	2.1	\$ 250,000	\$ 375,000	\$ 78	\$ 101	-22%
FTSCLANT (Norfolk)							
Tech Assist	9.8	9.3	\$ 659,599	\$ 587,330	\$ 38	\$ 36	7%
Operational Assessment	2.4	2.8	\$ 194,400	\$ 220,400	\$ 46	\$ 44	3%
Fleet Modernization	0.5	0.5	\$ 40,500	\$ 39,400	\$ 46	\$ 44	3%
Condition Assessment	2.4	2.8	\$ 194,400	\$ 220,400	\$ 46	\$ 44	3%
ILS/Planned Maintenance	1.0	1.0	\$ 81,000	\$ 78,700	\$ 46	\$ 44	3%
Foreign Military Sales	0.6	0.0	\$ -	\$ -	\$ -	\$ -	0%
Sub-Total	16.7	16.4	\$ 1,169,899	\$ 1,146,230	\$ 39	\$ 39	0%
FTSCLANT (Mayport)							
Tech Assist	2.4	1.7	\$ 114,629	\$ 104,622	\$ 27	\$ 35	-22%
Operational Assessment	1.0	0.7	\$ 45,544	\$ 19,405	\$ 26	\$ 16	64%
Fleet Modernization	0.1	0.3	\$ 8,100	\$ 9,382	\$ 46	\$ 18	159%
Condition Assessment	1.0	0.7	\$ 41,112	\$ 19,405	\$ 23	\$ 16	48%
ILS/Planned Maintenance	0.0	0.0	\$ -	\$ -	\$ -	\$ -	0%
Sub-Total	4.5	3.4	\$ 209,385	\$ 152,814	\$ 26	\$ 25	4%
FTSCLANT (Naples)							
Tech Assist	1.0	1.0	\$ 40,097	\$ 34,140	\$ 23	\$ 19	17%
Operational Assessment	0.9	0.9	\$ 36,088	\$ 30,735	\$ 23	\$ 19	17%
Fleet Modernization	0.0	0.0	\$ -	\$ -	\$ -	\$ -	0%
Condition Assessment	0.0	0.0	\$ -	\$ -	\$ -	\$ -	0%
ILS/Planned Maintenance	0.0	0.0	\$ -	\$ -	\$ -	\$ -	0%
Sub-Total	1.9	1.9	\$ 76,185	\$ 64,875	\$ 23	\$ 19	17%
FTSCLANT Sub-Total	23.1	21.7	\$ 1,455,469	\$ 1,363,919	\$ 35	\$ 35	0%

Cost Elements/Sub-Elements	FY03 Total Wk/Yr	FY02 Total Wk/Yr	FY03 Labor Cost	FY02 Labor Cost	FY03 Labor Rates	FY02 Labor Rates	% Change in Labor Rates
FTSCPAC (San Diego)							
Tech Assist	5.1	4.3	\$ 409,829	\$ 335,456	\$ 45	\$ 44	3%
Operational Assessment	1.8	2.4	\$ 150,279	\$ 186,134	\$ 47	\$ 44	8%
Fleet Modernization	0.2	0.2	\$ 9,217	\$ 7,715	\$ 31	\$ 22	41%
Condition Assessment	0.4	0.4	\$ 33,831	\$ 31,101	\$ 47	\$ 44	7%
ILS/Planned Maintenance	1.3	1.5	\$ 109,599	\$ 124,441	\$ 47	\$ 47	2%
Sub-Total	8.8	8.8	\$ 712,755	\$ 684,847	\$ 46	\$ 44	4%
FTSCPAC (Everett)							
Tech Assist	1.2	1.3	\$ 63,735	\$ 64,731	\$ 29	\$ 28	4%
Operational Assessment	0.4	0.6	\$ 20,406	\$ 27,201	\$ 29	\$ 26	13%
Fleet Modernization	0.0	0.0	\$ -	\$ -			
Condition Assessment	0.1	0.1	\$ 4,983	\$ 4,792	\$ 42	\$ 27	54%
ILS/Planned Maintenance	0.2	0.0	\$ 10,203	\$ 498	\$ 29		
Sub-Total	1.9	2.0	\$ 99,326	\$ 97,222	\$ 29	\$ 27	7%
FTSCPAC (Pearl Harbor)							
Tech Assist	2.4	2.5	\$ 208,987	\$ 199,393	\$ 49	\$ 45	8%
Operational Assessment	0.2	0.0	\$ 3,919	\$ -	\$ 11		
Fleet Modernization	0.0	0.0	\$ -	\$ -			
Condition Assessment	0.0	0.0	\$ -	\$ -			
ILS/Planned Maintenance	0.0	0.0	\$ -	\$ -			
Sub-Total	2.6	2.5	\$ 212,906	\$ 199,393	\$ 46	\$ 45	2%
FTSCPAC (Yoko/Saesbo)							
Tech Assist	1.3	1.3	\$ 36,414	\$ 35,589	\$ 16	\$ 15	2%
Operational Assessment	0.1	0.1	\$ 1,475	\$ 1,284	\$ 16	\$ 7	125%
Fleet Modernization	0.0	0.0	\$ -	\$ -			
Condition Assessment	0.0	0.0	\$ -	\$ -			
ILS/Planned Maintenance	0.0	0.0	\$ 1,006	\$ 1,006	\$ 16		
Sub-Total	1.4	1.4	\$ 38,895	\$ 37,879	\$ 16	\$ 15	4%
FTSCPAC (Singapore)	0.4	0.4	\$ 51,500	\$ 50,000	\$ 73	\$ 70	3%
FTSCPAC Sub-Total	15.1	15.1	\$ 1,115,382	\$ 1,069,341	\$ 42	\$ 40	4%
NAVICP							
DLA							
PBL	0.8	0.8	\$ 55,125	\$ 53,465	\$ 39	\$ 38	3%
NAVICP Sub-Total	0.8	0.8	\$ 55,125	\$ 53,465	\$ 39	\$ 38	3%
PEO(EXW)/NAVSEA							
Acquisition Mgmt	1.2	1.2	\$ 126,414	\$ 122,609	\$ 59	\$ 58	3%
Engineering Mgmt	0.2	0.2	\$ 21,514	\$ 20,867	\$ 61	\$ 59	3%
Program Management	1.4	1.4	\$ 126,414	\$ 122,609	\$ 51	\$ 49	3%
Fleet Support	1.6	1.6	\$ 146,712	\$ 128,863	\$ 52	\$ 45	14%
PEP	0.2	0.2	\$ 22,909	\$ 21,354	\$ 65	\$ 60	7%
PEO Sub-Total	10.1	4.6	\$ 443,963	\$ 416,302	\$ 25	\$ 51	-51%
Raytheon, Tucson							
Design Agent Engineering Svcs							
AEGIS Support							
OEM DA Sub-Total							
Raytheon, Louisville							
Depot							
Depot (LHD 8)							
OEM Depot Sub-Total							
Shipboard Manning							
Shipboard Manning (1070 Billets)	1070.0	1070.0	\$ 56,507,932	\$ 45,971,834	\$ 30	\$ 24	23%
Sailors Sub-Total	1070.0	1070.0	\$ 56,507,932	\$ 45,971,834	\$ 30	\$ 24	23%

Cost Elements/Sub-Elements	FY03 Total Wk/Yr	FY02 Total Wk/Yr	FY03 Labor Cost	FY02 Labor Cost	FY03 Labor Rates	FY02 Labor Rates	% Change in Labor Rates
CNET							
Blk 0/1 Dif Course Cost (SD)			\$ 31,296	\$ 30,384			3%
Blk I O&M Course (SD)			\$ 3,053,909	\$ 2,964,960			3%
Blk I O&M Course (DN)			\$ 703,457	\$ 682,968			3%
Blk I Difference Course (SD)			\$ 118,648	\$ 115,192			3%
Blk I Difference Course (DN)			\$ 3,583,276	\$ 3,478,909			3%
Blk IB Course Cost (SD)			\$ -	\$ -			
CNET Sub-Total			\$ 7,490,586	\$ 7,272,413			3%
Blk 0/I Dif Course Student Pay (SD)			\$ 125,775	\$ 122,112			3%
Blk I O&M Course Student Pay (SD)			\$ 2,840,513	\$ 2,757,780			3%
Blk I O&M Course Student Pay (DN)			\$ 136,034	\$ 132,072			3%
Blk I Dif Course Student Pay (SD)			\$ 178,058	\$ 172,872			3%
Blk I Dif Course Student Pay (DN)			\$ 2,566,702	\$ 2,491,944			3%
Blk IB Course Student Pay (SD)			\$ -	\$ -			
Students Sub-Total			\$ 5,847,082	\$ 5,676,780			3%
FMP							
AIT (Less \$ to Louisville)			\$ 671,000	\$ 356,000			88%
SHIPALT Funding			\$ -	\$ -			
DSA			\$ 4,102,000	\$ 1,186,000			246%
FMP Sub-Total			\$ 4,773,000	\$ 1,542,000			210%
CNSP							
OPTAR Funding							
TYCOM funding							
CNSP Sub-Total							
CNSL							
OPTAR Funding	0.0	0.0	\$ -	\$ -			
TYCOM Funding	0.5	0.5	\$ 63,000	\$ 60,000	\$ 71	\$ 68	5%
CNSL Sub-Total	0.5	0.5	\$ 63,000	\$ 60,000	\$ 71	\$ 68	5%
Program Total (w/o Man/students)	94.5	75.0	\$ 20,168,445	\$ 15,550,680	\$ 120	\$ 117	3%
Program Total (W/Manning)	1164.5	1145.0	\$ 82,523,459	\$ 67,199,294	\$ 40	\$ 33	21%

Cost Elements/Sub-Elements	FY03 Govm't Travel	FY02 Govm't Travel	FY03 Gov't Material	FY02 Gov't Material	% Change in Gov't Material
ISEA					
Program Management	\$ 8,000	\$ -	\$ -	\$ 16,045	-100%
Systems Eng/Fleet Support	\$ 40,631	\$ 219,418	\$ 1,046	\$ -	
Acquisition Management	\$ 2,000	\$ -	\$ -	\$ -	
Computer Resources	\$ 5,500	\$ -	\$ 1,000	\$ -	
Integrated Logistics Support	\$ 10,000	\$ 13,936	\$ -	\$ -	
Configuration Management	\$ 6,000	\$ -	\$ -	\$ -	
Core Sub-Total	\$ 72,131	\$ 233,354	\$ 2,046	\$ 16,045	-87%
CIWS-AEGIS Eng Support	\$ 3,648	\$ 4,875	\$ -	\$ -	
CIWS LOCO	\$ 9,913	\$ -	\$ -	\$ 329,409	-100%
CIWS Block 0 AIT Upgrade	\$ 17,339	\$ 24,000	\$ 5,000	\$ 57,339	-91%
Foreign Military Sales	\$ -	\$ -	\$ -	\$ -	0%
CIWS MODs	\$ -	\$ 1,027	\$ 407,309	\$ 192,327	112%
NAVICP Support	\$ -	\$ -	\$ -	\$ -	
CIWS FMP SHIPALT Support	\$ 74,511	\$ 38,361	\$ 23,565	\$ 140,402	-83%
Non-Core Sub-Total	\$ 105,411	\$ 68,263	\$ 435,874	\$ 719,477	-39%
ISEA Sub-Total	\$ 177,542	\$ 301,617	\$ 437,920	\$ 735,522	-40%
NWAS					
TE Certification/MRDB Efforts	\$ -	\$ -	\$ -	\$ -	
NWAS Sub-Total	\$ -	\$ -	\$ -	\$ -	
FTSCLANT (Norfolk)					
Tech Assist	\$ 45,000	\$ 45,000	\$ -	\$ -	
Operational Assessment	\$ -	\$ -	\$ -	\$ -	
Fleet Modernization	\$ -	\$ -	\$ 53,000	\$ 53,000	0%
Condition Assessment	\$ -	\$ -	\$ -	\$ -	
ILS/Planned Maintenance	\$ 5,000	\$ 5,000	\$ -	\$ -	
Foreign Military Sales	\$ -	\$ -	\$ -	\$ -	
Sub-Total	\$ 50,000	\$ 50,000	\$ 53,000	\$ 53,000	0%
FTSCLANT (Mayport)					
Tech Assist	\$ 10,000	\$ 10,000	\$ -	\$ -	
Operational Assessment	\$ 5,000	\$ -	\$ -	\$ -	
Fleet Modernization	\$ -	\$ -	\$ 10,000	\$ 10,000	0%
Condition Assessment	\$ 5,000	\$ -	\$ -	\$ -	
ILS/Planned Maintenance	\$ -	\$ -	\$ -	\$ -	
Sub-Total	\$ 20,000	\$ 10,000	\$ 10,000	\$ 10,000	0%
FTSCLANT (Naples)					
Tech Assist	\$ 35,000	\$ 25,700	\$ -	\$ -	
Operational Assessment	\$ -	\$ -	\$ -	\$ -	
Fleet Modernization	\$ -	\$ -	\$ -	\$ -	
Condition Assessment	\$ -	\$ -	\$ -	\$ -	
ILS/Planned Maintenance	\$ -	\$ -	\$ -	\$ -	
Sub-Total	\$ 35,000	\$ 25,700	\$ -	\$ -	
FTSCLANT Sub-Total	\$ 105,000	\$ 85,700	\$ 63,000	\$ 63,000	0%

Cost Elements/Sub-Elements	FY03 Govm't Travel	FY02 Govm't Travel	FY03 Gov't Material	FY02 Gov't Material	% Change in Gov't Material
FTSCPAC (San Diego)					
Tech Assist	\$ 45,645	\$ 39,691			
Operational Assessment	\$ 19,365	\$ 18,801			
Fleet Modernization	\$ -	\$ -			
Condition Assessment	\$ 9,040	\$ 8,777			
ILS/Planned Maintenance	\$ 44,016	\$ 42,734			
Sub-Total	\$ 118,065	\$ 110,003			
FTSCPAC (Everett)					
Tech Assist	\$ 15,403	\$ 14,954			
Operational Assessment	\$ 10,297	\$ 9,997			
Fleet Modernization	\$ -	\$ -			
Condition Assessment	\$ -	\$ -			
ILS/Planned Maintenance	\$ 2,150	\$ 283			
Sub-Total	\$ 27,850	\$ 25,234			
FTSCPAC (Pearl Harbor)					
Tech Assist	\$ 11,408	\$ 11,076			
Operational Assessment	\$ 3,203	\$ 3,110			
Fleet Modernization	\$ -	\$ -			
Condition Assessment	\$ -	\$ -			
ILS/Planned Maintenance	\$ -	\$ -			
Sub-Total	\$ 14,611	\$ 14,186			
FTSCPAC (Yoko/Saesbo)					
Tech Assist	\$ 15,818	\$ 15,357			
Operational Assessment	\$ 9,918	\$ 9,629			
Fleet Modernization	\$ -	\$ -			
Condition Assessment	\$ -	\$ -			
ILS/Planned Maintenance	\$ -	\$ -			
Sub-Total	\$ 25,735	\$ 24,986			
FTSCPAC (Singapore)					
FTSCPAC Sub-Total	\$ 186,261	\$ 174,409			
NAVICP					
DLA			\$ 7,210,000	\$ 7,000,000	3%
PBL	\$ 3,500	\$ 3,000	\$ 28,200,000		
NAVICP Sub-Total	\$ 3,500	\$ 3,000	\$ 35,410,000	\$ 7,000,000	406%
PEO(EXW)/NAVSEA					
Acquisition Mgmt	\$ 11,000	\$ 11,000	\$ 1,000	\$ 1,000	0%
Engineering Mgmt	\$ 11,000	\$ 11,000	\$ 1,000	\$ 1,000	0%
Program Management	\$ 11,000	\$ 11,000	\$ 1,000	\$ 1,000	0%
Fleet Support	\$ 16,000	\$ 16,000	\$ 1,000	\$ 1,000	0%
PEP	\$ 11,000	\$ 11,000	\$ 1,000	\$ 1,000	0%
PEO Sub-Total	\$ 60,000	\$ 60,000	\$ 5,000	\$ 5,000	0%
Raytheon, Tucson					
Design Agent Engineering Srves					
AEGIS Support					
OEM DA Sub-Total					
Raytheon, Louisville					
Depot					
Depot (LHD 8)					
OEM Depot Sub-Total					
Shipboard Manning					
Shipboard Manning (1070 Billets)	\$ -		\$ -		
Sailors Sub-Total	\$ -		\$ -		

Cost Elements/Sub-Elements	FY03 Govm't Travel	FY02 Govm't Travel	FY03 Gov't Material	FY02 Gov't Material	% Change in Gov't Material
CNET					
Blk 0/I Dif Course Cost (SD)			\$ 24,275	\$ 23,568	3%
Blk I O&M Course (SD)			\$ 1,008,205	\$ 978,840	3%
Blk I O&M Course (DN)			\$ 61,751	\$ 59,952	3%
Blk I Difference Course (SD)			\$ 28,379	\$ 27,552	3%
Blk I Difference Course (DN)			\$ 1,520,076	\$ 1,475,802	3%
Blk IB Course Cost (SD)			\$ -	\$ -	
CNET Sub-Total			\$ 2,642,686	\$ 2,565,714	3%
Blk 0/I Dif Course Student Pay (SD)					
Blk I O&M Course Student Pay (SD)					
Blk I O&M Course Student Pay (DN)					
Blk I Dif Course Student Pay (SD)					
Blk I Dif Course Student Pay (DN)					
Blk IB Course Student Pay (SD)					
Students Sub-Total					
FMP					
AIT (Less \$ to Louisville)					
SHIPALT Funding					
DSA					
FMP Sub-Total					
CNSP					
OPTAR Funding			\$ 9,008,214	\$ 350,000	2474%
TYCOM funding			\$ 1,212,104	\$ 902,543	34%
CNSP Sub-Total			\$ 10,220,318	\$ 1,252,543	716%
CNSL					
OPTAR Funding	\$ -	\$ -	\$ 147,000	\$ 490,000	-70%
TYCOM Funding	\$ -	\$ -	\$ 58,500	\$ 56,000	4%
CNSL Sub-Total	\$ -		\$ 205,500	\$ 546,000	-62%
 Program Total (w/o Man/students)	 \$ 532,303	 \$ 624,726	 \$ 48,984,424	 \$ 12,167,779	 303%
Program Total (W/Manning)	\$ 532,303	\$ 624,726	\$ 48,984,424	\$ 12,167,779	303%

Cost Elements/Sub-Elements	FY03 Cont'r Wk/Yr	FY02 Cont'r Wk/Yr	FY03 Cont'r Cost	FY02 Cont'r Cost	FY03 Cont'r Labor Rates	FY02 Cont'r Labor Rates	% Change in Cont'r Labor Rates
ISEA							
Program Management	0.0	0.0	\$ -	\$ -			
Systems Eng/Fleet Support	0.3	2.0	\$ 35,000	\$ 393,135	\$ 79	\$ 111	-29%
Acquisition Management	0.0	0.0	\$ -	\$ -			
Computer Resources	0.0	0.0	\$ -	\$ -			
Integrated Logistics Support	1.0	1.2	\$ 78,000	\$ 141,798	\$ 44	\$ 67	-34%
Configuration Management	0.0	0.0	\$ -	\$ -			
Core Sub-Total	1.3	3.2	\$ 113,000	\$ 534,933	\$ 51	\$ 94	-46%
CIWS-AEGIS Eng Support	0.0	0.0	\$ -	\$ -			
CIWS LOCO	0.0	0.0	\$ -	\$ -			
CIWS Block 0 AIT Upgrade	0.0	0.0	\$ -	\$ -			
Foreign Military Sales	0.0	0.0	\$ -	\$ -			
CIWS MODs	0.0	0.0	\$ -	\$ -			
NAVICP Support	0.0	0.0	\$ -	\$ -			
CIWS FMP SHIPALT Support	9.1	0.5	\$ 900,000	\$ 45,898	\$ 56	\$ 52	8%
Non-Core Sub-Total	9.1	0.5	\$ 900,000	\$ 45,898	\$ 56	\$ 52	8%
ISEA Sub-Total	10.4	3.7	\$ 1,013,000	\$ 580,831	\$ 55	\$ 88	-38%
NWAS							
TE Certification/MRDB Efforts	0.0	0.0	\$ -	\$ -			
NWAS Sub-Total	0.0	0.0	\$ -	\$ -			
FTSCLANT (Norfolk)							
Tech Assist	0.0	0.0	\$ -	\$ 6,000			
Operational Assessment	0.9	0.9	\$ 76,500	\$ 76,500	\$ 48	\$ 48	0%
Fleet Modernization	2.4	4.8	\$ 205,000	\$ 410,000	\$ 48	\$ 48	0%
Condition Assessment	0.9	0.9	\$ 76,500	\$ 76,500	\$ 48	\$ 48	0%
ILS/Planned Maintenance	0.0	0.0	\$ -	\$ -			
Foreign Military Sales	0.8	0.8			\$ -	\$ -	
Sub-Total	5.0	7.4	\$ 358,000	\$ 569,000	\$ 40	\$ 43	-7%
FTSCLANT (Mayport)							
Tech Assist	0.0	0.0	\$ -	\$ -			
Operational Assessment	0.0	0.0	\$ -	\$ -			
Fleet Modernization	0.0	0.0	\$ -	\$ -			
Condition Assessment	0.0	0.0	\$ -	\$ -			
ILS/Planned Maintenance	0.2	0.2	\$ 17,000	\$ 17,000	\$ 48	\$ 48	0%
Sub-Total	0.2	0.2	\$ 17,000	\$ 17,000	\$ 48	\$ 48	0%
FTSCLANT (Naples)							
Tech Assist	0.0	0.0	\$ -	\$ -			
Operational Assessment	0.0	0.0	\$ -	\$ -			
Fleet Modernization	0.0	0.0	\$ -	\$ -			
Condition Assessment	0.0	0.0	\$ -	\$ -			
ILS/Planned Maintenance	0.0	0.0	\$ -	\$ -			
Sub-Total	0.0	0.0	\$ -	\$ -			
FTSCLANT Sub-Total	5.2	7.6	\$ 375,000	\$ 586,000	\$ 41	\$ 43	-6%

Cost Elements/Sub-Elements	FY03 Cont'r Wk/Yr	FY02 Cont'r Wk/Yr	FY03 Cont'r Cost	FY02 Cont'r Cost	FY03 Cont'r Labor Rates	FY02 Cont'r Labor Rates	% Change in Cont'r Labor Rates
FTSCPAC (San Diego)							
Tech Assist							
Operational Assessment							
Fleet Modernization							
Condition Assessment							
ILS/Planned Maintenance							
Sub-Total							
FTSCPAC (Everett)							
Tech Assist							
Operational Assessment							
Fleet Modernization							
Condition Assessment							
ILS/Planned Maintenance							
Sub-Total							
FTSCPAC (Pearl Harbor)							
Tech Assist							
Operational Assessment							
Fleet Modernization							
Condition Assessment							
ILS/Planned Maintenance							
Sub-Total							
FTSCPAC (Yoko/Saesbo)							
Tech Assist							
Operational Assessment							
Fleet Modernization							
Condition Assessment							
ILS/Planned Maintenance							
Sub-Total							
FTSCPAC (Singapore)							
FTSCPAC Sub-Total							
NAVICP							
DLA							
PBL				\$ 21,600,000			
NAVICP Sub-Total				\$ 21,600,000			
PEO(EXW)/NAVSEA							
Acquisition Mgmt	1.0	1.0	\$ 178,390	\$ 156,333	\$ 101	\$ 88	14%
Engineering Mgmt	2.0	2.0	\$ 500,000	\$ 526,000	\$ 141	\$ 148	-5%
Program Management	2.5	2.5	\$ 402,260	\$ 360,667	\$ 91	\$ 81	12%
Fleet Support	0.0	0.0	\$ -				
PEP	0.0	0.0	\$ -				
PEO Sub-Total	5.5	5.5	\$ 1,080,650	\$ 1,043,000	\$ 111	\$ 107	4%
Raytheon, Tucson							
Design Agent Engineering Svcs			\$ 3,025,000	\$ 3,050,000			
AEGIS Support			\$ -				
OEM DA Sub-Total			\$ 3,025,000	\$ 3,050,000			
Raytheon, Louisville							
Depot			\$ 47,199,000	\$ 47,069,549			
Depot (LHD 8)			\$ 11,000,000				
OEM Depot Sub-Total			\$ 58,199,000	\$ 47,069,549			
Shipboard Manning							
Shipboard Manning (1070 Billets)	0.0		\$ -				
Sailors Sub-Total	0.0		\$ -				

Cost Elements/Sub-Elements	FY03 Cont'r Wk/Yr	FY02 Cont'r Wk/Yr	FY03 Cont'r Cost	FY02 Cont'r Cost	FY03 Cont'r Labor Rates	FY02 Cont'r Labor Rates	% Change in Cont'r Labor Rates
CNET							
Blk 0/1 Dif Course Cost (SD)							
Blk I O&M Course (SD)							
Blk I O&M Course (DN)							
Blk I Difference Course (SD)							
Blk I Difference Course (DN)							
Blk IB Course Cost (SD)							
CNET Sub-Total							
Blk 0/1 Dif Course Student Pay (SD)							
Blk I O&M Course Student Pay (SD)							
Blk I O&M Course Student Pay (DN)							
Blk I Dif Course Student Pay (SD)							
Blk I Dif Course Student Pay (DN)							
Blk IB Course Student Pay (SD)							
Students Sub-Total							
FMP							
AIT (Less \$ to Louisville)							
SHIPALT Funding							
DSA							
FMP Sub-Total							
CNSP							
OPTAR Funding							
TYCOM funding							
CNSP Sub-Total							
CNSL							
OPTAR Funding	0.0	0.0	\$ -	\$ -			
TYCOM Funding	1.5	1.5	\$ 245,000	\$ 233,000	\$ 92	\$ 88	5%
CNSL Sub-Total	1.5	1.5	\$ 245,000	\$ 233,000	\$ 92	\$ 88	5%
 Program Total (w/o Man/students)	22.6	18.3	\$ 63,937,650	\$ 74,162,380	\$ 1,597	\$ 2,283	-30%
Program Total (W/Manning)	22.6	18.3	\$ 63,937,650	\$ 74,162,380	\$ 1,597	\$ 2,283	-30%

Cost Elements/Sub-Elements	FY03 Cont'r Trav/ Mat	FY02 Cont'r Trav/ Mat	FY03 \$ To Other Activity	FY02 \$ To Other Activity	FY03 \$ From Other Activity	FY02 \$ From Other Activity	USN Total Cost	USN Total Cost	% Change in Total Cost
ISEA									
Program Management	\$ 91,178	\$ 42,704	\$ -	\$ -	\$ -	\$ -	\$ 587,148	\$ 404,010	45%
Systems Eng/Fleet Support	\$ 133,759	\$ 1,787	\$ -	\$ 133,260	\$ -	\$ -	\$ 1,661,834	\$ 2,440,582	-32%
Acquisition Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 214,705	\$ 143,347	50%
Computer Resources	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 557,030	\$ 254,687	119%
Integrated Logistics Support	\$ 68,656	\$ 62,901	\$ -	\$ -	\$ -	\$ -	\$ 632,114	\$ 477,175	32%
Configuration Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 181,169	\$ 135,973	33%
Core Sub-Total	\$ 293,593	\$ 107,392	\$ -	\$ 133,260	\$ -	\$ -	\$ 3,834,000	\$ 3,855,774	-1%
CIWS-AEGIS Eng Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 110,000	\$ 60,875	81%
CIWS LOCO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 182,579	\$ 646,361	-72%
CIWS Block 0 AIT Upgrade	\$ -	\$ 4,346	\$ 110,000	\$ 123,318	\$ -	\$ -	\$ 300,000	\$ 269,416	11%
Foreign Military Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CIWS MODs	\$ 840,680	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,351,839	\$ 225,418	500%
NAVICP Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,200	\$ 27,144	-77%
CIWS FMP SHIPALT Support	\$ 512,000	\$ 522	\$ -	\$ 78,681	\$ -	\$ -	\$ 2,122,037	\$ 378,741	460%
Non-Core Sub-Total	\$ 1,352,680	\$ 4,868	\$ 110,000	\$ 201,999	\$ -	\$ -	\$ 4,072,655	\$ 1,607,955	153%
ISEA Sub-Total	\$ 1,646,273	\$ 112,260	\$ 110,000	\$ 335,259	\$ -	\$ -	\$ 7,906,655	\$ 5,463,729	45%
NWAS									
TE Certification/MRDB Efforts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 375,000	-33%
NWAS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 250,000	0%
FTSCLANT (Norfolk)									
Tech Assist	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 704,599	\$ 638,330	10%
Operational Assessment	\$ -	\$ -	\$ 63,000	\$ 63,000	\$ -	\$ -	\$ 333,900	\$ 359,900	-7%
Fleet Modernization	\$ 34,000	\$ 34,000	\$ -	\$ -	\$ 90,300	\$ 90,300	\$ 422,800	\$ 626,700	-33%
Condition Assessment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 270,900	\$ 296,900	-9%
ILS/Planned Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 86,000	\$ 83,700	3%
Foreign Military Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total	\$ 34,000	\$ 34,000	\$ 63,000	\$ 63,000	\$ 90,300	\$ 90,300	\$ 1,818,199	\$ 2,005,530	-9%
FTSCLANT (Mayport)									
Tech Assist	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 124,629	\$ 114,622	9%
Operational Assessment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,544	\$ 19,405	160%
Fleet Modernization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,100	\$ 19,382	-7%
Condition Assessment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46,112	\$ 19,405	138%
ILS/Planned Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,000	\$ 17,000	0%
Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 256,385	\$ 189,814	
FTSCLANT (Naples)									
Tech Assist	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,097	\$ 59,840	25%
Operational Assessment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,088	\$ 30,735	17%
Fleet Modernization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Condition Assessment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
ILS/Planned Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 111,185	\$ 90,575	23%
FTSCLANT Sub-Total	\$ 34,000	\$ 34,000	\$ 63,000	\$ 63,000	\$ 90,300	\$ 90,300	\$ 2,185,769	\$ 2,285,919	-4%

Cost Elements/Sub-Elements	FY03 Cont'r Trav/ Mat	FY02 Cont'r Trav/ Mat	FY03 \$ To Other Activity	FY02 \$ To Other Activity	FY03 \$ From Other Activity	FY02 \$ From Other Activity	USN Total Cost	USN Total Cost	% Change in Total Cost
FTSCPAC (San Diego)									
Tech Assist							\$ 455,474	\$ 375,147	21%
Operational Assessment							\$ 169,644	\$ 204,935	-17%
Fleet Modernization							\$ 9,217	\$ 7,715	19%
Condition Assessment							\$ 42,872	\$ 39,878	8%
ILS/Planned Maintenance							\$ 153,615	\$ 167,175	-8%
Sub-Total							\$ 830,820	\$ 794,850	5%
FTSCPAC (Everett)									
Tech Assist							\$ 79,137	\$ 79,685	-1%
Operational Assessment							\$ 30,702	\$ 37,198	-17%
Fleet Modernization							\$ -	\$ -	-
Condition Assessment							\$ 4,983	\$ 4,792	4%
ILS/Planned Maintenance							\$ 12,353	\$ 781	1482%
Sub-Total							\$ 127,176	\$ 122,456	4%
FTSCPAC (Pearl Harbor)									
Tech Assist							\$ 220,395	\$ 210,469	5%
Operational Assessment							\$ 7,122	\$ 3,110	129%
Fleet Modernization							\$ -	\$ -	-
Condition Assessment							\$ -	\$ -	-
ILS/Planned Maintenance							\$ -	\$ -	-
Sub-Total							\$ 227,517	\$ 213,579	7%
FTSCPAC (Yoko/Saesbo)									
Tech Assist							\$ 52,231	\$ 50,946	3%
Operational Assessment							\$ 11,393	\$ 10,913	4%
Fleet Modernization							\$ -	\$ -	-
Condition Assessment							\$ -	\$ -	-
ILS/Planned Maintenance							\$ 1,006	\$ 1,006	-
Sub-Total							\$ 64,630	\$ 62,865	3%
FTSCPAC (Singapore)							\$ 51,500	\$ 50,000	3%
FTSCPAC Sub-Total							\$ 1,301,643	\$ 1,243,750	5%
NAVICP									
DLA							\$ 7,210,000	\$ 7,000,000	3%
PBL							\$ 28,258,625	\$ 21,656,465	30%
NAVICP Sub-Total							\$ 35,468,625	\$ 28,656,465	24%
PEO(EXW)/NAVSEA									
Acquisition Mgmt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 316,804	\$ 290,942	9%
Engineering Mgmt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 533,514	\$ 558,867	-5%
Program Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 540,674	\$ 495,276	9%
Fleet Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 163,712	\$ 145,863	12%
PEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,909	\$ 33,354	5%
PEO Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,589,613	\$ 1,524,302	4%
Raytheon, Tucson									
Design Agent Engineering Svcs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,025,000	\$ 3,050,000	-1%
AEGIS Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
OEM DA Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,025,000	\$ 3,050,000	-1%
Raytheon, Louisville									
Depot	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,199,000	\$ 47,069,549	0%
Depot (LHD 8)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,000,000	\$ -	-
OEM Depot Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58,199,000	\$ 47,069,549	24%
Shipboard Manning									
Shipboard Manning (1070 Billets)	\$ -		\$ -		\$ -		\$ 56,507,932	\$ 45,971,834	23%
Sailors Sub-Total	\$ -		\$ -		\$ -		\$ 56,507,932	\$ 45,971,834	23%

Cost Elements/Sub-Elements	FY03 Cont'r Trav/ Mat	FY02 Cont'r Trav/ Mat	FY03 \$ To Other Activity	FY02 \$ To Other Activity	FY03 \$ From Other Activity	FY02 \$ From Other Activity	USN Total Cost	USN Total Cost	% Change in Total Cost
CNET									
Blk 0/I Dif Course Cost (SD)							\$ 55,571	\$ 53,952	3%
Blk I O&M Course (SD)							\$ 4,062,114	\$ 3,943,800	3%
Blk I O&M Course (DN)							\$ 765,208	\$ 742,920	3%
Blk I Difference Course (SD)							\$ 147,027	\$ 142,744	3%
Blk I Difference Course (DN)							\$ 5,103,352	\$ 4,954,711	3%
Blk IB Course Cost (SD)							\$ -	\$ -	
CNET Sub-Total							\$ 10,133,272	\$ 9,838,127	3%
Blk 0/I Dif Course Student Pay (SD)							\$ 125,775	\$ 122,112	3%
Blk I O&M Course Student Pay (SD)							\$ 2,840,513	\$ 2,757,780	3%
Blk I O&M Course Student Pay (DN)							\$ 136,034	\$ 132,072	3%
Blk I Dif Course Student Pay (SD)							\$ 178,058	\$ 172,872	3%
Blk I Dif Course Student Pay (DN)							\$ 2,566,702	\$ 2,491,944	3%
Blk IB Course Student Pay (SD)							\$ -	\$ -	
Students Sub-Total							\$ 5,847,082	\$ 5,676,780	3%
FMP									
AIT (Less \$ to Louisville)					\$ -		\$ 671,000	\$ 356,000	88%
SHIPALT Funding					\$ -		\$ -	\$ -	
DSA					\$ -		\$ 4,102,000	\$ 1,186,000	246%
FMP Sub-Total					\$ -		\$ 4,773,000	\$ 1,542,000	210%
CNSP									
OPTAR Funding							\$ 9,008,214	\$ 350,000	2474%
TYCOM funding							\$ 1,212,104	\$ 902,543	34%
CNSP Sub-Total							\$ 10,220,318	\$ 1,252,543	716%
CNSL									
OPTAR Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 147,000	\$ 490,000	-70%
TYCOM Funding	\$ -	\$ -	\$ 64,000	\$ 61,000	\$ -	\$ 61,000	\$ 430,500	\$ 471,000	-9%
CNSL Sub-Total	\$ -	\$ -	\$ 64,000	\$ 61,000	\$ -	\$ 61,000	\$ 577,500	\$ 961,000	-40%
Program Total (w/o Man/students)	\$ 1,680,273	\$ 146,260	\$ 237,000	\$ 459,259	\$ 90,300	\$ 151,300	\$ 135,630,395	\$ 103,137,384	32%
Program Total (W/Manning)	\$ 1,680,273	\$ 146,260	\$ 237,000	\$ 459,259	\$ 90,300	\$ 151,300	\$ 197,985,409	\$ 154,785,998	28%

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